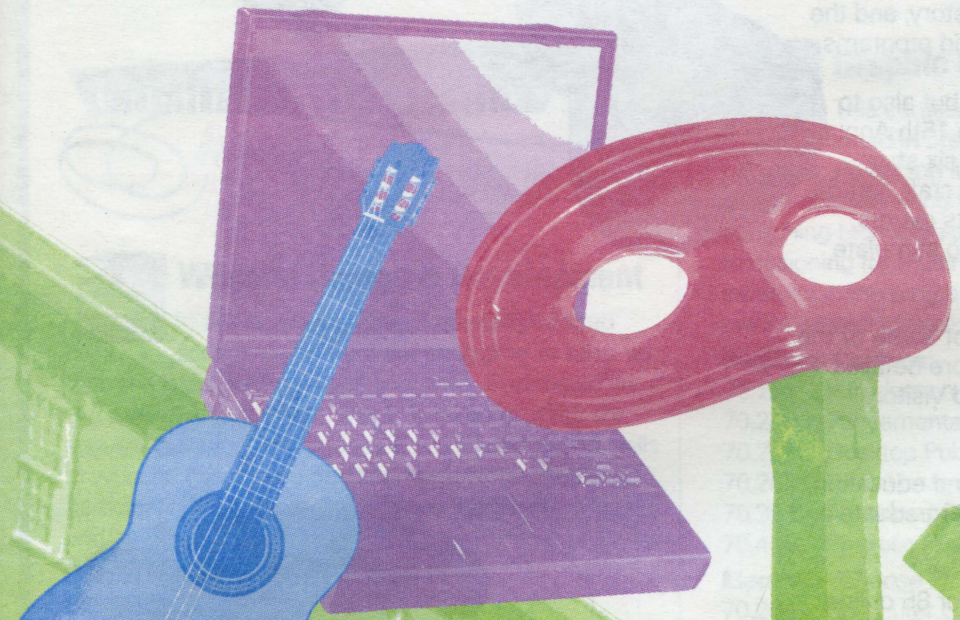
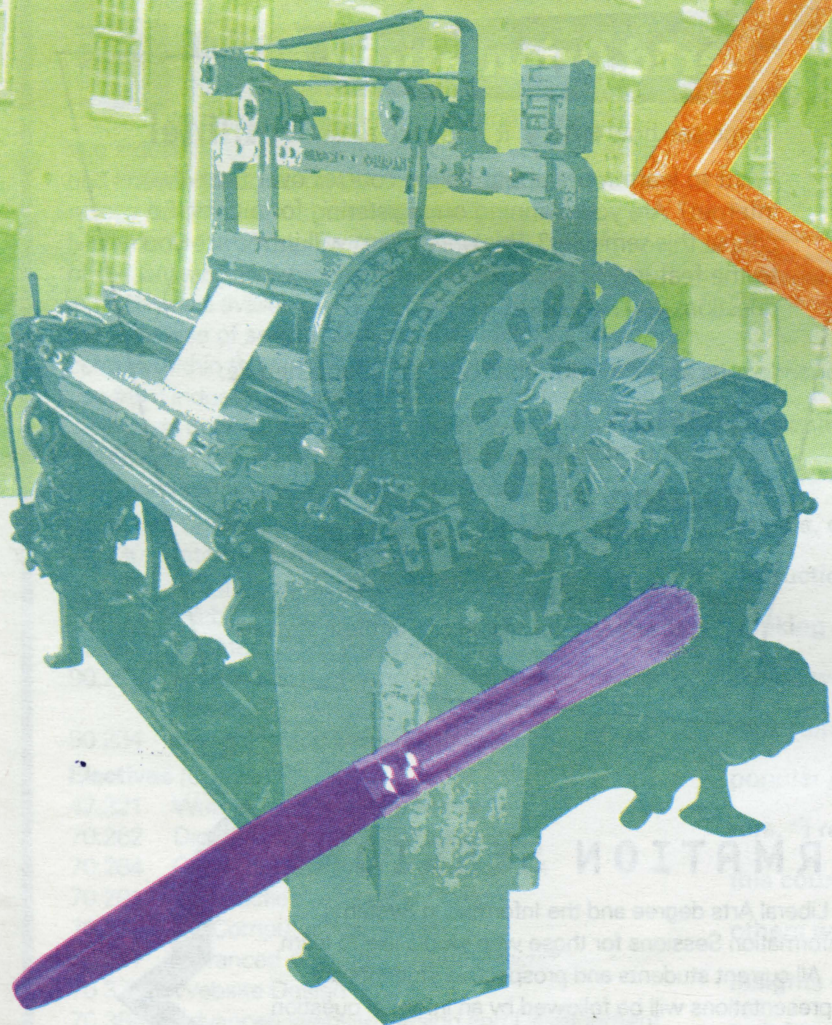
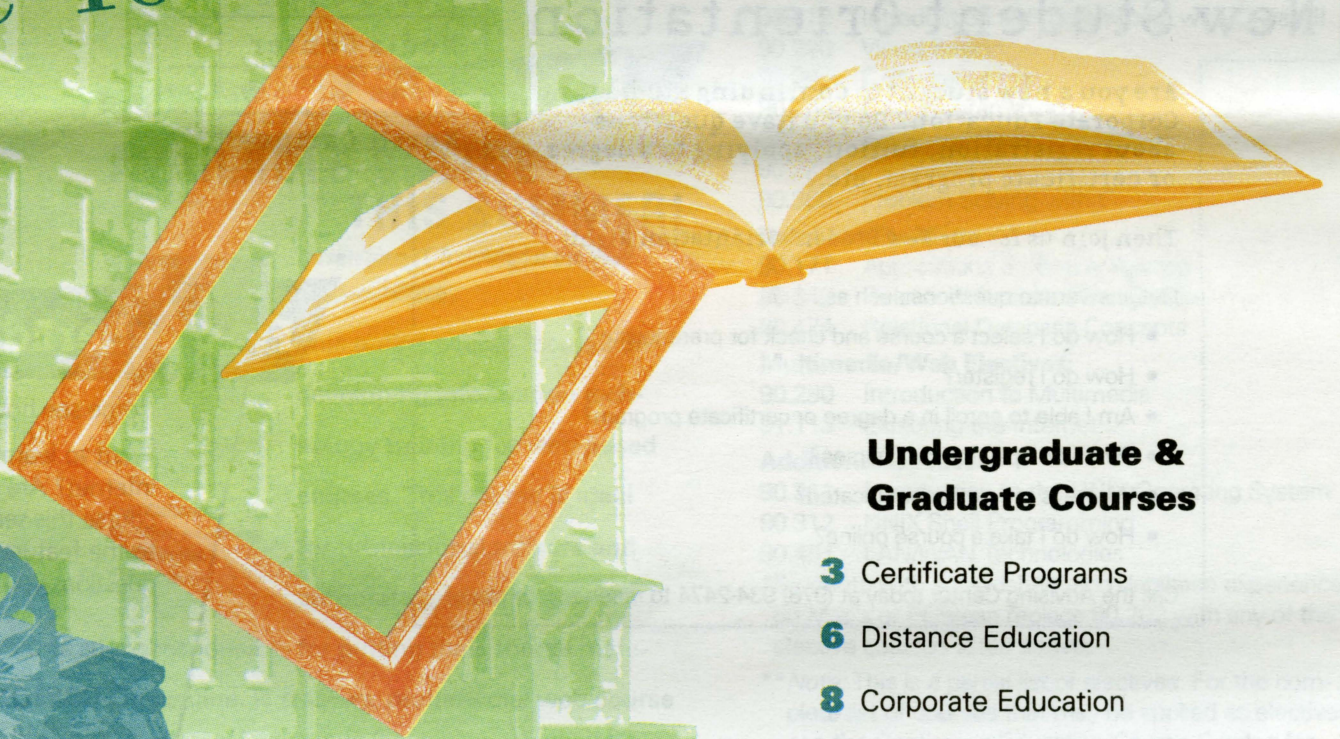


2001 Summer



This Summer: Celebrate Lowell's Culture While You Earn a Degree



Undergraduate & Graduate Courses

- 3** Certificate Programs
- 6** Distance Education
- 8** Corporate Education
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- 17** General, Academic, and
Registration Information
- 20** Registration Form

Summer Session I
May 29–Jun 29

Summer Session II
Jul 9–Aug 17

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University of Massachusetts Lowell
Continuing Studies and Corporate Education
One University Avenue
Lowell, MA 01854-2881
(978) 934-2480

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a duplicate copy, please share it with a friend.

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UMass Lowell

This Summer: Celebrate Lowell's Culture While You Earn a Degree

With the publication of UMass Lowell's Summer 2001 Bulletin, we are showcasing the city of Lowell, a city rich in history, and the cultural backdrop against which the University offers many of its courses and programs.

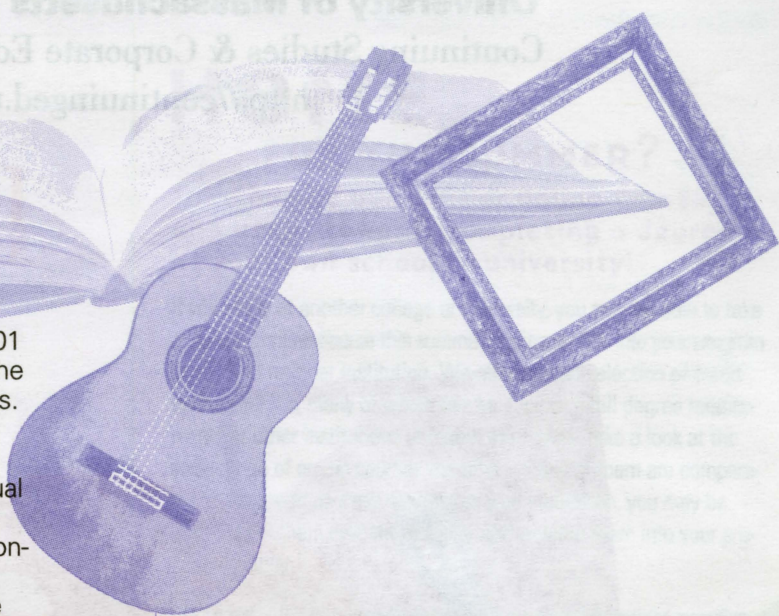
This Summer offers not only the opportunity to continue your education — but also to explore a city brimming with activities the whole family can enjoy. From the 15th Annual Lowell Folk Festival (the largest free folk festival in the United States), with six stages, three days of traditional music and dance, street parades, ethnic foods, and craft demonstrations presented throughout the city from July 27th to July 29th; to sports events, historical parks, museums, and the theater, there are abundant attractions to stimulate your intellectual curiosity.

For your convenience we have printed a calendar listing on the back cover of some of the most exciting things happening in Lowell from May through August. For more detailed information, you can log on to the Greater Merrimack Valley Convention and Visitors Bureau website at <http://www.merrimackvalley.org>.

At UMass Lowell, there are multiple opportunities to advance your career and education, with over 500 courses from which to choose, many of them leading to undergraduate and graduate degrees and certificate programs.

Even if you can't come to Lowell this summer, you can take advantage of our 85 online courses, from a variety of subjects, offered conveniently over the Internet, providing the flexibility you may prefer.

This summer, savor the city while learning in Lowell!



continuinged.uml.edu

UMASS LOWELL

CHECK OUT OUR
WORLD WIDE WEB SITE!

Continuing Studies information can also be retrieved over the World Wide Web. Look for us at <http://continuinged.uml.edu> for additional information on current course schedules, course descriptions, degree or certificate program information, and much more!

New Student Orientation

Are you a new student to Continuing Studies and Corporate Education? Do you have questions about registration, tuition, applying to a degree or certificate program, etc.?

Then join us for our New Student Orientation Night!

Get answers to questions such as:

- How do I select a course and check for prerequisites?
- How do I register?
- Am I able to enroll in a degree or certificate program?
- When do I pay for my courses?
- Where is my classroom located?
- How do I take a course online?

Call the Advising Center today at (978) 934-2474 to reserve your place!

2 0 0 1

Thursday

May 17, 2001

7:00-8:00 pm

Media Center

Lydon Library

North Campus

Free CyberEd Orientation!

Come see how **easy** it is to take a course **online!**

Want to learn more about taking courses over the Internet? Are you planning on registering for a CyberEd course this semester? This orientation will introduce you to the features of your online course and answer any questions you may have.

Join us at the session that best fits your schedule:

Session 1:

Thursday, May 17, 6:30-7:15 pm

Session 2:

Thursday, May 17, 7:30-8:15 pm

Call (978) 934-2474

to reserve your seat in one of these sessions!

OPEN HOUSE & GENERAL REGISTRATION

Thursday, May 17, 2001

5:00-7:30pm

Southwick Hall, North Campus

Find out about:

- Evening Certificate Programs & Degrees
- Financial Aid
- CyberEd Online Courses

Academic Advisors will be available at UMass Lowell North Campus.

For further information, call (978) 934-2480.

NEW! INFORMATION SESSIONS

Advisors for the Bachelor of Liberal Arts degree and the Information Systems degree programs will hold Information Sessions for those who would like to learn more about these programs. All current students and prospective students are invited to participate. These presentations will be followed by an informal question and answer period.

THE DATES ARE: MONDAY, JUNE 11 6:00-7:00 PM
MONDAY, JULY 23 6:00-7:00 PM

Call the Advising Center today at 978-934-2474 to reserve your place.

Certificate Programs

Training for High-Demand Careers

Creative Arts/Media APPLICATIONS



Website Design & Development

In our rapidly-evolving, knowledge-based economy, workers are struggling to keep up with the latest technologies and skills. Specifically, in the area of internet technology, local companies are actively pursuing employees with knowledge and skills in website design and development. Note: Students participating in this program should have basic Mac OS and/or Windows familiarity.

Required Courses:

- 90.291 Introduction to HTML
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.238 Website Development
- 70.379 Website Design
- 70.384 Advanced Website Design and Development

Electives (Choose 2):

- 70.262 Digital Imaging and Photography
- 70.385 Streaming Media for the Web
- 90.230 Introduction to Multimedia
- 90.236 Instructional Design for Interactive Media
- 90.245 Website Server Administration
- 90.246 Active Server Pages
- 90.247 Advanced Web Authoring: Flash™
- 90.248 Website Database Implementation
- 90.249 Developing IT Training for the Web
- 90.250 E-Commerce on the Web
- 90.292 Advanced HTML
- 90.301 Java Programming
- 90.302 JavaScript
- 90.305 Introduction to Perl
- 90.306 Introduction to XML



Multimedia Applications

The multimedia industry is booming and promises to become one of the most lucrative industries of the century. Individuals with the skills and knowledge to communicate using the new technology will flourish in this merging industry. The Multimedia Certificate Program at UMass Lowell is one of the largest, most comprehensive programs of study in multimedia available in New England. It draws upon the expertise of several departments, colleges, and centers within the University, as well as outside expertise from industry professionals.

You can now earn the Certificate in Multimedia Applications online! See the CyberEd website at <http://cybered.uml.edu> for more information.

Required Courses:

- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.232 Desktop Video Production
- 90.233 Multimedia Authoring Software: Macromedia Director®
- 90.234 Designing and Developing Interactive Media

Electives (Choose 2):

- 42.221 Writing for Interactive Media
- 70.262 Digital Imaging and Photography
- 70.264 Computer Graphics and Illustration
- 70.291 Introduction to Graphic Design
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design and Development
- 70.385 Streaming Media for the Web
- 90.236 Instructional Design for Interactive Media
- 90.238 Website Development
- 90.239 Multimedia Scripting Using Macromedia Director's Lingo™
- 90.247 Advanced Web Authoring: Flash™
- 90.249 Developing IT Training for the Web



Graphic Design & Digital Imaging

This certificate program offers students interested in breaking into graphic design and electronic publishing an innovative mix of traditional design courses along with several courses in the latest publishing technologies. From traditional graphic design to designing for multimedia and the World Wide Web, students in the program complete numerous portfolio pieces geared towards the professional market.

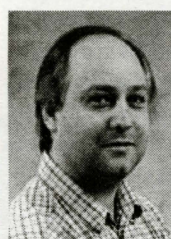
Required Courses:

- 70.291 Introduction to Graphic Design
- 70.240 Fundamentals of Typography
- 70.245 Desktop Publishing: Layout and Production
- 70.262 Digital Imaging and Photography
- 70.391 Advanced Graphic Design
- 70.400 Portfolio Production Seminar

Electives (Choose 2):

- 70.264 Computer Graphics & Illustration
- 70.362 Advanced Digital Imaging
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design & Development
- 70.392 Design for Advertising
- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.233 Multimedia Authoring Software: Macromedia Director®
- 90.238 Website Development

AVAILABLE ONLINE THIS SUMMER!



Fred Plaisted
Manager, e-Learning
Technologies,
EMC Corp.

Developing IT Training for the Web (Course #90.249)

This online course focuses on developing information technology training for web-based courses. This course is ideal for professional trainers and corporate professionals who

are responsible for putting their course materials online. IT trainers, multimedia/web course developers, directors of e-learning, HR professionals, directors of training, CBT developers, instructional designers, and teachers who are thinking about putting their course materials online would also benefit from this course.

According to Fred Plaisted, one of our most popular online course instructors, "I really enjoy teaching this course and providing others with some creative insights on developing effective training materials for online use."



Information TECHNOLOGY



Fundamentals of Information Technology

The need for professionals with a strong information technology background will continue to increase as business, government, schools, and other organizations seek new applications for computers and networks in the workplace. This certificate is designed as an introductory program for those who want to explore a broad range of electives in different subject areas before deciding on an area of specialization. This program can be used as a gateway to the other, more specialized certificate programs.

You can earn the Certificate in Fundamentals of Information Technology entirely online, on campus, or by taking a combination of online and on campus courses. For more details, please see our CyberEd website at <http://cybered.uml.edu>!

Required Courses:

- 90.160 Introduction to Information Systems
- 90.202 Introduction to Personal Computing and Microsoft Office*

Electives (Choose 4):

Programming Electives:

- 90.211 Introduction to Programming with C, Part I
- 90.212 Introduction to Programming with C, Part II
- 90.220 Visual Basic
- 90.267 C Programming
- 90.268 C++ Programming
- 90.269 Advanced C++
- 90.270 Visual C++
- 90.360 Problem Solving with C

Database Electives:

- 90.171 Applications Software: Access
- 90.342 Relational Database Integration
- 90.474 Relational Database Concepts

Multimedia/Web Electives:

- 90.230 Introduction to Multimedia
- 91.113 Exploring the Internet

Additional Electives:

- 90.311 Introduction to the UNIX Operating System
- 90.312 UNIX Shell Programming
- 90.461 LAN/WAN Technologies

*Students with spreadsheet and database experience on Mac's or PC's can replace 90.202 with any of the elective courses listed above.

**Note: This is a partial list of electives. For the complete list of courses that may be applied as electives, see the Continuing Education Course Catalog for computer courses with the 90. or 92. prefix.



Client/Server Database Design and Administration

Economic indicators, business surveys, and professional IT recruitment agencies show a major shortage of IT skills today and well into the future. One of the greatest demands for skilled IT professionals is in Database Design and Administration. With every aspect of today's businesses being moved to E-Commerce to service the vast global economy, professionals skilled in database technology are in critical demand. This certificate is designed to provide a strong background in all areas of database and data-related skills: operating system platforms, database design, development, and administration. Utilizing state-of-the-art labs, hands-on skill building and projects are emphasized.

Required Courses:

Note: Students with experience equivalent to any of the required courses may substitute up to two electives for the required courses, with prior approval of the program coordinator.

- 90.443 Fundamentals of Client/Server Computing
- 90.450 Oracle Architecture and Administration
- 90.454 Introduction to PL/SQL
- 90.474 Relational Database Concepts

Electives (Choose 2):

- 90.220 Visual Basic
- 90.311 Introduction to the UNIX Operating System
- 90.445 SQL Database Servers
- 90.453 Advanced Database Administration
- 92.479 Advanced Database Applications: Powerbuilder



UNIX®

The Certificate in UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this fast-growing field. Students learn skills that are immediately applicable in the workplace as well as C Programming, the language in which most networking software is written. Many of the courses in the UNIX certificate program may be used to satisfy requirements in the Fundamentals of Information Technology and Data/Telecommunications Certificate Programs, as well as the A.S. or B.S. degrees in Information Systems.

You can now earn the Certificate in UNIX online! See the CyberEd website at <http://cybered.uml.edu> for more information.

Required Courses:

- 90.267 C Programming
- 90.311 Introduction to the UNIX Operating System
- 90.312 UNIX Shell Programming
- 90.360 Introduction to Data Structures

Electives (Choose 2):

- 90.268 C++ Programming
- 90.269 Advanced C++
- 90.313 UNIX Internals Overview
- 92.314 UNIX System Interface Programming
- 90.316 UNIX System Administration
- 90.318 Advanced UNIX Internals/Tuning



Data/Telecommunications

Networking is a multi-billion dollar industry. The Certificate Program in Data/Telecommunications trains participants for positions as entry-level network administrators, LAN technicians, and system analysts responsible for networking functions in large or small companies. Many of the courses in this certificate program can be applied towards the A.S. or B.S. degree in Information Systems.

Required Courses:

- 90.267 C Programming
- 90.311 Introduction to the UNIX Operating System
- 90.461 LAN/WAN Technologies
- 90.462 TCP/IP and Network Architecture
- 90.463 Advanced Networking Technologies
- 90.464 Network Management

UMass Lowell and Nortel Networks, Inc. also offer a joint certificate program in Data/Telecommunications. For more information call (978) 934-2480 or visit our website at <http://continuing.uml.edu>.



Intranet Development

The Certificate Program in Intranet Development provides students with an understanding of the range of skills required to develop a successful intranet. Students are required to complete an intranet survey course, a database design course, and an interface design course, as well as core programming courses. In addition, students will select two electives which support an area of focus in intranet development. Students completing the Certificate Program in Intranet Development can qualify for positions as intranet developers, database integration specialists, systems operators, systems administrators, or corporate Webmasters.

Earn the Certificate in Intranet Development online! See the CyberEd website at <http://cybered.uml.edu> for more information.

Required Courses:

- 90.340 Intro to the Application and Development of Intranets
- 90.341 Intranet Applications for the Organization
- 90.461 LAN/WAN Technologies
- 90.474 Relational Database Concepts

Electives (Choose 2):

- 90.267 C Programming
- 90.268 C++ Programming
- 90.301 JAVA Programming
- 90.305 Introduction to Perl
- 90.342 Relational Database Integration
- 90.455 Intranet Network Interface Design
- 90.462 TCP/IP and Network Architecture
- 90.490 Intranet Practicum/Internship



Computer Engineering Technology

The Certificate Program in Computer Engineering Technology is designed to provide students with a broad-based knowledge of digital electronics, microprocessors and advanced digital technologies. Students enrolled in the program must complete the seven courses listed below. The curriculum includes engineering science and design courses that provide a balanced view of hardware, software, application trade-offs, and the basic modeling techniques used in computer engineering. All the courses in this certificate program can be applied towards the B.S. degree in Electronic Engineering Technology.

Required Courses:

- 17.347 Logic Design B
- 17.348 Logic Design C & Laboratory
- 17.353 Digital Electronics
- 17.383 Microprocessors A
- 17.384 Microprocessors B
- 90.267 C Programming
- 90.268 C++ Programming



Electronics Technology

The Certificate Program in Electronics Technology is designed to provide students with a broad-based knowledge of circuit theory and electronics, with laboratory work included to ensure that good hands-on experience is acquired along with the deep understanding of fundamental and changing technologies. All the courses in this certificate program can be applied towards the A.S. or B.S. degree in Electronic Engineering Technology.

Required Courses:

- 17.213 Electric Circuits
- 17.214 Circuits and Laboratory I
- 17.215 Circuits and Laboratory II
- 17.216 Advanced Circuits
- 17.346 Logic Design A
- 17.355 Electronics & Laboratory I
- 17.356 Electronics & Laboratory II
- 17.357 Electronics & Laboratory III
- 17.358 Electronics & Laboratory IV



Computer-Assisted Manufacturing

As the United States focuses on the challenges of global economic competition, one of the key tools for sharpening our competitive edge is the use of the computer as an aid to engineering and manufacturing. The Certificate Program in Computer-Assisted Manufacturing is designed to provide engineers, technicians, managers, and those working in a manufacturing environment with an introduction to the computer as used to enhance industrial competitiveness. Students will apply various popular software packages and work with personal computers, workstations, and stand-alone computer-controlled machine tools.

Required Courses:

- 23.200 CADr (Computer-Aided Drafting)
- 23.419 Computer-Aided Manufacturing
- 23.480 CADes (Computer-Aided Design)
- 23.484 Intro to Pro-E

Electives (Choose 2):

- 23.101 Engineering Graphics
- 23.102 Engineering Design and Graphics
- 23.301 Manufacturing Technology Laboratory
- 23.305 Manufacturing Processes OR
- 23.306 Electronics Manufacturing Technology
- 23.430 Industrial Automation
- 23.474 Design for Manufacture



Environmental Technology

This certificate program is designed for personnel employed in safety, laboratory, physical plant, distribution, transportation, drafting, public works, or health board functions, as well as consultants. Students in the program gain knowledge relevant to air pollution control, resource recovery, analytical services, hazardous waste management, waste management, water infrastructure, instrument manufacturing, solid waste management, energy sources, asbestos abatement, and water utilities development. Many of the courses in this certificate can be applied towards the B.S. in Civil Engineering Technology: Environmental Option.

Required Courses:

- 15.340 Hazardous Waste Management
- 15.378 Air Quality Monitoring
- 15.420 Solid Waste Management
- 86.131 Chemistry I OR 84.121 Chemistry I
- 84.122 Chemistry II OR 86.132 Environmental Chemistry II

Electives (Choose 2):

- 15.280 Industrial Waste Treatment
- 15.356 Water Treatment
- 15.358 Wastewater Treatment
- 15.388 Pumps and Compressors
- 17.130 Electrical Basics and Laboratory
- 41.367 Environmental Law
- 87.403 GIS in Environmental Studies
- 00.000 OSHA HAZWOPER

Free Professional Development Courses for Mathematics Teachers!

A Consortium of District Mathematics Leaders Building Regional Capacity

UMass Lowell, the Center for Mathematics Education at EDC, and the Eastern Mathematics Association of Mathematics Department Heads are pleased to offer a National Science Foundation-funded summer program for department heads, curriculum coordinators, and lead teachers. The funding includes tuition, textbooks, and a stipend.

The program will feature advanced disciplinary content, seminars in professional development and leadership, and mentored academic year field experience.

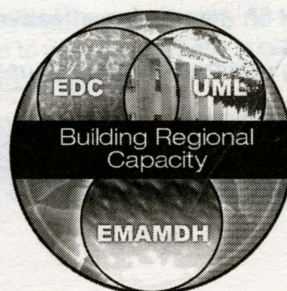
July 16– July 27, 2001

04.536-021 Professional Development for Mathematics Leaders

92.500-021 Discrete Structures

92.500-022 Discrete Structures

For more information, contact Alan Doerr at (978) 934-2415 or email: Alan_Doerr@uml.edu.





Hazardous Waste Management

The Certificate Program in Hazardous Waste Management is designed to provide environmental technicians, engineers, managers, and those working in the environmental field with an introduction to regulations and treatment technologies. Course work covers basic environmental chemistry, state and federal environmental regulations, various types of groundwater contamination and suitable technologies to abate hazardous waste contamination.

Required Courses:

- 15.280 Industrial Waste Treatment
- 15.340 Hazardous Waste Management
- 15.396 Groundwater Resources
- 41.367 Environmental Law
- 86.131 Environmental Chemistry I

Electives (Choose 2):

- 15.388 Pumps and Compressors
- 15.420 Solid Waste Management
- 15.492 Water/Wastewater Plant Management
- 86.132 Environmental Chemistry II
- 00.000 OSHA HAZWOPER



Wastewater Treatment

The Certificate Program in Wastewater Treatment prepares students for all levels of state certification required to manage and operate a modern wastewater treatment facility. The program is designed for individuals seeking to enter the field of wastewater treatment and for those in the field who want to upgrade their skills or achieve a higher level of state certification. Many of the courses in this certificate can be applied towards the A.S. in Civil Engineering Technology: Wastewater Option.

Required Courses:

- 15.261 Wastewater Treatment Plant Operations I
- 15.263 Wastewater Operations Lab I
- 15.280 Industrial Waste Treatment
- 15.361 Wastewater Treatment Plant Operations II
- 15.363 Wastewater Treatment Lab II

Electives (Choose 2):

- 15.152 Water Biology
- 15.388 Pumps and Compressors
- 15.452 Operation and Maintenance of Wastewater Collection Systems
- 15.492 Water/Wastewater Plant Management
- 86.131 Environmental Chemistry I
- 86.132 Environmental Chemistry II



Water Treatment

The Certificate Program in Water Treatment provides the most effective way to prepare for the water treatment certification exams. Courses in this program are intended to provide students with the technical knowledge to operate and maintain physical/chemical water treatment facilities and water distribution systems. Many of the courses in this certificate can be applied towards the A.S. degree in Civil Engineering Technology: Water Option.

Required Courses:

- 15.272 Water Supply & Treatment Operations I
- 15.274 Water Works Operations Lab I
- 15.355 Water Distribution Systems
- 15.372 Water Supply and Treatment Operations II
- 86.131 Environmental Chemistry I

Electives (Choose 2):

- 15.152 Water Biology
- 15.374 Water Works Operations Lab II
- 15.388 Pumps and Compressors
- 15.492 Water/Wastewater Plant Management
- 86.132 Environmental Chemistry II



LMI Employees

Graduate from UMass Lowell's Water Treatment Certificate Program

December 14, 2000 — UMass Lowell's Continuing Studies and Corporate Education faculty and staff help celebrate the completion of six courses in Water Treatment by 24 employees from Liquid Metronics Inc. (LMI), an Acton-based maker of metering pumps. The UMass Lowell/LMI training initiative was funded through a grant from the Massachusetts Workforce Training Fund, which provides resources to Massachusetts businesses and workers to train current and newly hired employees.

NEW!

The Certificate Program in Contemporary Communications

The Contemporary Communications Certificate is intended as an introductory certificate to prepare students for work in a rapidly changing, information-driven workplace. Students will develop skills in research, analysis, writing, graphic presentation of material, and the use of technology as a tool for communication. This certificate program is interdisciplinary and draws upon the expertise and knowledge of several departments within the University. Many of the courses in this certificate can also be applied towards several other certificates and degrees offered by UMass Lowell.

Required Courses:

Written Communication (Choose 1):

- 42.221 Writing for Interactive Media
- 42.226 Technical and Scientific Communication
- 42.224 Business Writing

Computer-Based Communications (Choose 1):

- 91.113 Exploring the Internet
- 90.202 Intro to PCs and MS Office

Strategic Thinking and Effective Communication (Choose 1):

- 45.205 Argumentation and Rhetoric
- 45.207 Corporate Communications
- 62.201 Marketing Principles

Multimedia/Graphic Design and Development (Choose 1):

- 70.291 Introduction to Graphic Design
- 90.230 Introduction to Multimedia

Electives (Choose 2):

- 42.221 Writing for Interactive Media
- 42.224 Business Writing
- 42.226 Technical and Scientific Communication
- 42.300 Journalism
- 45.205 Argumentation and Rhetoric
- 45.207 Corporate Communications
- 45.356 The History, Theory, and Practice of Rhetoric
- 62.201 Marketing Principles
- 70.291 Introduction to Graphic Design
- 90.202 Intro to PCs and MS Office
- 90.230 Introduction to Multimedia
- 90.291 Intro to HTML
- 91.113 Exploring the Internet

*NOTE: Check distance ed course listings for online offerings in this certificate.

Continuing Studies and the
UML Music Department

summer music education program

July 9 - August 17, 2001

For K-12 Music Educators

Summer offerings will include undergraduate and graduate-level courses in:

- K-12 Choral Techniques
July 9-20
M-F, 9 a.m.- 3 p.m., 3 credits
Instructors:
Thomas & Holly Stumpf
73.414-021
- Multicultural Music Education
July 23-Aug. 3
M-F, 9 a.m.- 3 p.m., 3 credits
Instructor: Marian Dura
73.490-021
- Finale: The Art of Music
Notation, Aug. 2-3
Th-F, 9 a.m.- 5 p.m., 1 credit
Instructors:
Dan Lutz and Deb Huber
73.464-021
- Computers in the Music
Curriculum, Aug. 6-17
M-F, 9 a.m.- 3 p.m., 3 credits
Instructor: Marian Dura
73.463-021

For prices and course descriptions, consult our website:
<http://continuinged.uml.edu>

Additional Certificate Programs

UMass Lowell also offers certificate programs in:

- Accounting
- Community Policing
- Electro-Optics
- Interactive Game Design
- Land Surveying
- Nutrition
- Paralegal Studies
- Quality Assurance
- Semiconductor Manufacturing
- Spanish
- Technical Writing

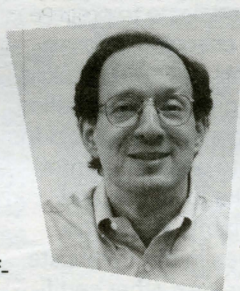
For more information
and a detailed program packet,
please call the Office of Continuing
Studies and Corporate Education
at (978) 934-2480.

INTRODUCING THE NEW BUSINESS MINOR OPTION

FOR THE ONLINE INFORMATION SYSTEMS DEGREE!

UMass Lowell is pleased to announce a new Business Minor option as part of the Online Information Systems Degree. Students who are interested in combining management-related courses with their information systems studies are now able to do so with this popular new option.

According to Professor Stuart Freedman, Chair of the Management Department, these online management classes appeal to a wide variety of students. "Students from all over enroll in our online *Organizational Behavior* class for many different reasons. Some students are currently enrolled in the Business Administration Program and they are planning full-time careers as managers in the business world. Other students are pursuing an Information Systems degree and can now use the class as a requirement towards the new Business Minor option."



Professor Stuart Freedman, Chair of the Management Department

Freedman, who has been teaching *Organizational Behavior* as an online course for the past four semesters has found it possible to get to know his students over the Internet and points out that the challenge of efficiently stimulating a classroom environment "can work spectacularly well" online. "I have found it to be a very positive experience and I really enjoy being part of this future!"

"I am pursuing a BS in Information Systems and am very excited to hear about the new online Business Minor. I've always had an interest in taking business courses and this new online Business Minor is the perfect opportunity for me to combine my interest in IS and Business Administration."

-Barbara Daverin, Online Information Systems Degree Candidate

www.umassonline.net

Introducing UMassOnline.net!

The global gateway for students to access all Web-based courses offered by the five UMass campuses

Summer School Just Got a Whole Lot More Convenient Thanks to Online Courses!

Imagine this... spending your summer days at the beach instead of inside a classroom, or how about not having to fight the traffic on those hot summer days to get to class on time? Or maybe you're looking for a way to finish your degree program, but you don't have time this summer to make it to class every week. At UMass Lowell, we've made taking summer classes more convenient than ever.

UMass Lowell's CyberEd program brings the classroom to you! By accessing course materials and interacting with faculty and classmates via the Internet and the World Wide Web, you can learn at a time and place that's convenient to you!

CyberEd courses are limited in size and offer a high level of personal interaction. For the latest information regarding our online courses and programs, visit <http://cybered.uml.edu>, or call (978) 934-2474 to reserve your seat at our Free CyberEd Orientation being offered on Thursday, May 17th.

Finish Your Degree Online!

UMass Lowell offers the following degrees entirely online:

- NEW!** • BS in Information Systems: Business Minor
- AS in Information Systems
- BS in Information Systems
- Bachelor's degree in Liberal Arts (BLA)

For more information on these programs, please visit <http://cybered.uml.edu>.

Pursue a Short-Term Certificate Program Online!

If you want to acquire specialized skills, but don't have a lot of extra time, consider one of the online certificate programs below to help you reach your career goals. Many of the courses taken towards these certificates can also be applied towards the online degree programs.

UMass Lowell offers 5 online certificate programs in:

- Multimedia Applications
- Fundamentals of Information Technology
- Intranet Development
- UNIX
- Data/Telecommunications

UMass Lowell Online Degrees & Certificate Programs

* Finish Your Associate's or Bachelor's Degree Online!

Whether you're just starting to pursue a degree or returning to finish your Associate's or Bachelor's degree, our online courses provide the convenience and flexibility you need.

Online Degrees Offered by UMass Lowell:

- * A.S. in Information Systems
- * B.S. in Information Systems
- * B.L.A. — Bachelor's Degree in Liberal Arts

NEW! * B.S. in Information Systems: Business Minor

* Interested in acquiring specialized skills but don't have a lot of extra time?

We offer short-term certificate programs online for training in areas of high demand!

UMass Lowell Offers Online Certificate Programs in:

- * Multimedia Applications
- * Fundamentals of Information Technology
- * Intranet Development
- * UNIX
- * Data Telecommunications

For complete information on these online degrees and certificate programs, please visit our CyberEd Website at <http://cybered.uml.edu>.

Course #	Course Title	Prerequisite/Requirements	Instructor
30.201-031	Community Health	Open to all students	Nicole Champagne
36.414-031 NEW	Infectious Disease	P: 1 semester of General Microbiology	Sandra Fessia-Richardson
36.613-031 NEW	Infectious Disease (Graduate)	P: 1 semester of General Microbiology	Sandra Fessia-Richardson
42.101-031	College Writing I	CommonSpace software	Richard Keating
42.102-031	College Writing II	P: 42.101, CommonSpace software	Richard Farrell
42.212-031	The Short Story	P: 42.102, CommonSpace software; LT	Ashmita Khasnabish
42.224-031	Business Writing	P: 42.102, students cannot earn credit for both 42.224 and 42.226, CommonSpace software	Nancy Brown
42.226-031	Technical and Scientific Communication	P: 42.102, CommonSpace software	Peter Payack
43.108-031	World History II	HS	David Kalivas
43.206-031	American Economic History	Proctored exams, HS	Joseph Lipchitz
43.274-031	Native American History	HS	Diane Lewis
47.101-031	General Psychology	Human Values, BS	Charlene Drake
47.351-031 NEW	Human Sexuality	P: 47.101	Mary Duell
47.477-031 NEW	Seminar: Contemporary Trends - Addictions	P: 47.101	Richard Siegel
48.101-031	Introduction to Sociology		John Ost
49.201-031	Economics I	P: 90.111; BS; proctored exams	Michael Carter
58.101-031	Art Appreciation	AE/Cultural Diversity	Liana Cheney
60.201-031	Accounting/Financial		Clairmont Carter
61.691-031 NEW	(Graduate) International Finance (7 weeks)	Permission MBA Program Director	Yash Puri
62.201-031 NEW	Marketing Principles	P: 47.101, 49.201, 48.101; proctored exams	Duncan LaBay
63.301-031 NEW	Management Information Systems (7 weeks)	BSBA or Bus. Minor students and COM Dean Permission; proctored exams	Luvai Motiwalla
63.471-031	Managerial Quality Control	BSBA or Bus. Minor students and COM Dean Permission; proctored exams	David Lewis
66.301-031	Organizational Behavior (7 weeks)	BSBA or Bus. Minor students and COM Dean Permission; proctored exams	Stuart Freedman
69.253-031	Intro. to Management & Organizational Behavior (7 weeks)	Proctored exams; not for BSBA students	Stuart Freedman
69.275-031	Total Quality Management	Proctored exams; not for BSBA students	David Lewis
84.101-031	Applied Chemistry for Non-Scientists	SL	Philip Lamprey
90.160-031	Introduction to Information Systems		Lisa Panagopoulos
90.160-032	Introduction to Information Systems		Sam Chaudhuri
90.160-033	Introduction to Information Systems		Sam Chaudhuri
90.202-031	Introduction to PC's & Microsoft Office	Microsoft Office 2000 Pro or higher	Robin Desmond
90.202-032	Introduction to PC's & Microsoft Office	Microsoft Office 2000 Pro or higher	Robin Desmond
90.220-031	Visual Basic	Visual Basic Vers. 6.0, Win., and working knowledge of high-level language	Department Faculty
90.224-031	Advanced Visual Basic	P: 90.220; Visual Basic Version 6.0	Arthur Chadbourne
90.230-031	Introduction to Multimedia	Software, see CyberEd website for details	Rob Graham
90.230-032	Introduction to Multimedia	Software, see CyberEd website for details	Rob Graham
90.230-033	Introduction to Multimedia	Software, see CyberEd website for details	Department Faculty
90.231-031	Graphics for Multimedia and the World Wide Web	Photoshop 5.0 or 5.5; access to a scanner	Randy Howe
90.232-031	Desktop Video Production	P: 90.230; Adobe Premiere (6.0)	Department Faculty
90.233-031	Multimedia Authoring Software: Director	P: 90.230; Macromedia Director 8	Beatrice Lee
90.238-031	Web Development: FrontPage/Windows	P: 90.291; 90.231 recommended MS FrontPage 2000 (Not FrontPage Express)	Fred Plaisted
90.238-032	Web Development: FrontPage/Windows	P: 90.291; 90.231 recommended MS FrontPage 2000 (Not FrontPage Express)	Judith Feeney
90.239-031	Multimedia Scripting Using Director's Lingo	P: 90.233; Macromedia Director 8	Jonathan Adams
90.247-031	Advanced WebAuthoring: Flash	P: 90.291, 90.302 or Programming familiarity and Flash	Michael Murie
90.249-031	Developing IT Training for the Web	P: 90.230	Fred Plaisted
90.267-031	C Programming	C Compiler software; prev. prog. experience	Timothy Niesen
90.267-032	C Programming	C Compiler software; prev. prog. experience	Ann Marie Hurley
90.268-031	C++ Programming	C++ Compiler software; prev. prog. experience	Mark Hertel
90.268-032	C++ Programming	C++ Compiler software; prev. prog. experience	Lance Smith
90.269-031	Advanced C++	P: 90.268; C++ Compiler software	Mark Hertel
90.270-031	Visual C++	P: 90.268; Visual C++ Compiler	Barbara Bancroft
90.291-031	Introduction to HTML		William Dubie
90.291-032	Introduction to HTML		Department Faculty
90.291-033	Introduction to HTML		William Dubie
90.291-034	Introduction to HTML		Jason Player
90.297-031	Intro. To Java Programming	Sun Java Dev. Kit	Lance Smith
90.301-031	Java Programming	P: 90.268 or 90.297; Sun Java Dev. Kit	Mark Cohen
90.302-031	JavaScript	P: 90.291 or knowledge of HTML	Dave Sciuto
90.302-032	JavaScript	P: 90.291 or knowledge of HTML	Gregory Rushton
90.303-031	Advanced Java Programming	P: 90.301; Sun Java Dev. Kit	Mark Cohen
90.305-031	Introduction to Perl	P: 90.267	Gregory Rushton
90.311-031	Intro. To Unix Op. Systems		Fred Vegliante
90.311-032	Intro. To Unix Op. Systems		Sean McGowan
90.312-031	Unix Shell Programming	P: 90.311 and 90.267 or 90.212	Michael Richards
90.342-031	Web-Enabled Database Development	P: 90.474	Justin Seiferth
90.360-031	Intro. to Data Structures	P: 90.267, or 90.212 and 90.364; proctored exams	Isobel Davis
90.364-031	Problem Solving w/C	P: 90.267 or 90.212	Sean McGowan
90.461-031	LAN/WAN Technologies	P: 90.267	Ed Barnes
90.462-031	TCP/IP & Network Architecture	P: 90.461	Ed Barnes
90.464-031	Network Management	P: 90.461 or 92.472	Jaime Fernandez
90.474-031	Relational Database Concepts	P: 90.267	Paul Giguere
91.113-031	Exploring the Internet		Department Faculty
92.121-031	Precalculus Mathematics I	P: 90.111 or equivalent. For students in the Info Systems Program, 92.121 can be substituted for the combination of 90.112 and 90.119. May req. proctored exams	Alan Doerr
92.183-031	Introduction to Statistics	P: 90.111 or equivalent; MA	Ann Marie Hurley
92.321-031	Discrete Structures I	P: 90.112 or 92.121; proctored exams	Alan Doerr
92.322-031	Discrete Structures II	P: 92.321	Kenneth Levasseur

Unless otherwise noted, all courses are 12 weeks and begin May 29, 2001. Undergraduate CyberEd courses are \$220.00 per credit; Graduate CyberEd Courses are \$300.00 per credit.

CyberEd Course Registration & Confirmation

Students should make sure they have fulfilled the particular course prerequisites prior to registering for a course. To register for a UMass Lowell CyberEd course, see the registration form on back cover, or call (978) 934-2700 or toll free 1-800-480-3190. Be sure to provide your email address when you register!

All students are assigned a user name, password, and the website address for their course. To obtain this information, each student must complete the Online Registration Confirmation. Two business days after registering for your CyberEd course, visit the CyberEd website at <http://cybered.uml.edu> and complete the Online Registration Confirmation. Students who do not receive this information prior to the first week of class should contact the CyberEd office at (978) 934-2467 or email cybered@uml.edu.

New! CyberEd students can order their textbooks directly from our online bookstore at <http://direct.mbsbooks.com/cybered.htm> or call 1-800-325-3252.

Technical Requirements

Students must provide the following:

- PC Users: Personal computer with Windows 95 or higher, Internet access, email address, Internet Explorer 4.0 or higher or Netscape Navigator/Communicator 4.0 to 4.7 (not version 6.x)
- Macintosh Users: Power PC or higher, OS 8.5 or higher, Internet access, email address, Netscape 4.0 to 4.7 only

Some courses have additional software requirements.

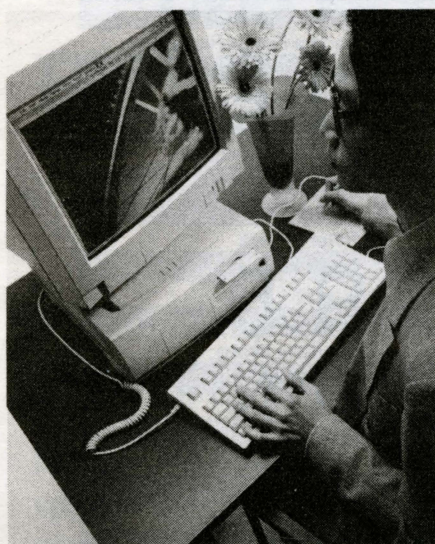
Student Technical Skills

All students new to CyberEd should complete the free online Demonstration course available on the CyberEd website. Various Internet utilities (e.g. mIRC, ftp, telnet) are required for some CyberEd courses. Students are responsible for learning to use course-related utilities before enrolling in a CyberEd course. Tutorials are available on the CyberEd website.

For the latest information regarding our online courses and programs, visit the CyberEd website at: <http://cybered.uml.edu> or call (978) 934-2474.

Note: There are no veteran or senior citizen waivers for distance education courses. Please refer to pages 17-18.

ON-SITE TRAINING AT LOCAL COMPANIES



Let our Corporate Training Team assist your company in delivering quality training!

When you work with UMass Lowell to arrange Corporate Training, you'll receive customized solutions designed to reduce time and costs. In addition to individual courses and certificate programs, UMass Lowell offers degree programs at all levels up through the doctorate. Our flexible course delivery options allow you to schedule training around your workload. We provide customized training by the day, week, or month — during or after working hours, or over the Internet.

FOR FURTHER INFORMATION, contact Catherine Kendrick at (978) 934-2495 or email: Catherine_Kendrick@uml.edu.

ONLINE

Plastics technology certificate program
Offered by UMass Lowell and Nyprom Online

UMass Lowell and Nyprom Online are pleased to offer an online Plastics Technology certificate program that allows students around the world to earn a credit-bearing certificate via the Internet. For more information, please visit www.nypromonline.com or call (978) 368-9684, extension 684.

ON-SITE

Training in Plastics Manufacturing

UMass Lowell, in collaboration with the Plastics Institute of America, offers a number of employee training modules designed to enhance the knowledge, understanding, and skills of technical staff working with plastics. These modules can be custom-designed to fit your company's specific training needs. For more information, call 978-934-2495.

Plastics Seminars & Workshops January – August 2001

UMass Lowell's Plastics Seminars and Workshops are highly respected throughout the plastics industry as a proven method for gaining both theoretical and practical information on plastics manufacturing, design, and quality control. Seminars are taught by UMass Lowell's internationally-respected Plastics Engineering faculty and many of the seminars include hands-on experience in the University's well-equipped plastics processing laboratories.

For more information, please visit our Website at <http://continuinged.uml.edu/plastics> or call (978) 934-2405 for a free brochure.

SUMMER 2001 GRADUATE COURSES in CRIMINAL JUSTICE

Held at the McCormack Building/Government Center in Boston

NOTE: See page 16 for additional Summer Graduate Courses.

SUMMER I

Criminological Theory
M/W 5-8:30 PM; Ron Corbett
44.521-291

Family Violence
T/Th 5-8:30 PM; Pat Kane-Thompson
44.622-291

Special Topics: The Community Court
T/Th 5-8:30 PM; John Curran
44.682-291

SUMMER II

Special Topics: Substance Abuse and Criminal Justice
M/W 5-8:30 PM; Tom Merrigan
44.682-292

Summer 2001 Courses at

Bedford, MA

Hanscom Air Force Base

Intro to HTML (Summer I)

T/Th: 5:00-8:30 pm
Janine Jacques; **90.291-041**

C++ Programming (Summer I)

M/W: 5:00-8:30 pm
Justin Seiferth; **90.268-041**

Bedford, MA

VA Medical Center

C Programming (Summer I)

T/Th: 5:00-8:30 pm
Fuquan Gao; **90.267-041**

TCP/IP and Network Architecture (Summer I)

M/W: 5:00-8:30 pm
Tom Stephenson; **90.462-041**

Westborough, MA

Undergraduate-Level

Organization of Programming Languages (14 weeks)

Th: 5:00-8:00 pm
P: 91.250 or equivalent
Krishnan Seetharaman; **91.301-491**

To register and for directions, please call Continuing Studies Enrollment Services at (978) 934-2480.

On-site Manufacturing Training

Interested in onsite corporate training in manufacturing and engineering? UMass Lowell has 11 training modules that can be customized to meet your corporate training needs:

- * Geometric Tolerancing
- * Control Systems
- * XY Mechanical Movements
- * Machine Control
- * Introduction to Pumps & Vacuum Systems
- * Shop Math
- * Statistical Process Control
- * Introduction to Engineering Drawing
- * Computer Fundamentals
- * Basic Fluid Power
- * Measuring and Gauging

FOR FURTHER INFORMATION, contact Catherine Kendrick at (978) 934-2495 or email: Catherine_Kendrick@uml.edu.



Part-Time Certificate Program in Plastics Engineering Technology

UMass Lowell offers a part-time, evening Certificate Program in Plastics Engineering Technology, designed to provide professional training for students needing theoretical and technical information about plastics. A specialized Packaging Option is also available for those students interested in focusing their studies in the area of packaging. For more information on this certificate program, visit our website at <http://continuinged.uml.edu> or call 978-934-2470 for a certificate information packet.

May 29–June 29
Summer Session I

Day Classes begin on May 29 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.
M/W Evening Classes begin on May 30 and include 3 FRIDAYS: June 1, June 15, and June 29 at the regularly scheduled hours.
T/Th Evening Classes begin on May 29 and include 2 FRIDAYS: June 8 and June 22 at the regularly scheduled hours.

*Reminder: this course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.
See separate listing for CyberEd courses on page 7.*

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Accounting	(Also see CyberEd course listings on page 7.)						
	60.201-011	Accounting/Financial	T/Th	6:00-9:30 pm	3		Charles Thompson
	60.202-011	Accounting/Managerial	M/W	6:00-9:30 pm	3	P: 60.201 or 67.102	Laura Scanlon
	60.331-011	Cost Management Systems	M/W	6:00-9:30 pm	3	P: 60.202, BSBA (non-Accounting students and College of Management Dean permission)	Paul Brown
	NOTE: Courses with the 67 prefix are not intended for students matriculating in the Bachelor of Science degree programs in the College of Management and will not transfer into the BSBA program. CERTIFICATE IN ACCOUNTING (See website for required courses.)						
Art/Computer Graphics	(Also see Information Technology for additional Multimedia and Web Development course offerings.)						
	70.255-011	Drawing: Form and Space	M-Th	9:00 am-Noon	3		Liam Sullivan
	70.264-021	Computer Graphics & Illustration: Adobe Illustrator/Mac (12 wks; no Fridays)	Tues	6:30-10:00 pm	3	P: Mac or Windows proficiency	Alene Sirott-Cope
	70.361-021	Photography II /Advanced Photo Workshop Abroad (see ad on page 20)			3	P: 70.261 and instructor permission	Arno Rafael Minkkinen
	70.362-011	Advanced Digital Imaging: Photoshop/Windows (5 wks plus 3 Fridays: 6/1, 6/15, 6/29)	M/W	6:00-9:30 pm	3	P: 70.262	Ella Carlson
	70.265-011	Computer Art I	M-Th	9:00 am-Noon	3	P: 70.255 or instructor permission	Department Faculty
	70.376-021	3D Computer Animation/Mac (12 wks; no Fridays)	Mon	6:30-10:00 pm	3	P: 70.264 or 90.231	Walter Wright
	70.378-021	Interactive Game Design/Windows (12 wks; no Fridays)	Tues	6:30-10:00 pm	3	P: 70.376 and 90.233	Walter Wright
	70.379-021	Website Design/Windows (12 wks; plus 2 Fridays: 6/15 & 7/13)	Thurs	6:00-9:00 pm	3	P: 90.238, and 90.231 or 70.262	Department Faculty
	70.381-021	Advanced Game Design/Windows (12 wks; no Fridays)	Tues	6:30-10:00 pm	3	P: 70.376, 70.378 and 90.233	Walter Wright
	70.384-021	Advanced Website Design and Development/Windows (12 weeks; no Fridays)	Wed	6:00-9:30 pm	3	P: 70.379, 90.238	Jay Kamins
	70.400-021	Portfolio Production Seminar (12 weeks; no Fridays)	Thurs	7:00-10:30 pm	3	P: 70.291, 70.240, 70.245, and 70.391 or permission of instructor	Kathleen McVay
	While some of the above courses will not directly transfer into the Art Department's BA/BFA day school degree program, certain two-course clusters may be accepted for transfer upon prior dept. approval. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 3 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.) CERTIFICATE IN INTERACTIVE GAME DESIGN (See website for required courses.)						
Art History	(Also see CyberEd course listings on page 7.)						
	58.101-011	Art Appreciation	M/W	6:30-10:00 pm	3	AE, Cultural Diversity	Charles Giuliano
	58.203-011	Survey of Art I	M-Th	8:00-10:20 am	3	AE, HS, Cultural Diversity	Cynthia Fowler
	58.221-011	Twentieth Century Art	M-Th	11:00 am-1:20 pm	3	AE, HS	Cynthia Fowler
	58.494-011	Directed Studies	TBA	TBA	3	AE	Liana Cheney
Biological Sciences	35.211-011	Basic Clinical Microbiology and Pathology	M-Th	9:00-11:20 am	3	P: 35.102, 35.104; C: 35.213; SL	Jacob Lam
	35.213-011	Basic Clinical Micro. and Pathology Lab	M/T/W	Noon-3:20 pm	1 (3)	P: 35.102, 35.104; C: 35.211; SL	Jacob Lam
	83.101-011	Life Science I	M-Th	11:00 am-1:20 pm	3	C: 83.103; SL	Siu-Lam Lee
	83.101-012	Life Science I	T/Th	6:00-9:30 pm	3	C: 83.103; SL	Maureen Lyons-Weiler
	83.103-011	Life Science I Lab	T/Th	2:00-4:00 pm	1 (2)	C: 83.101; SL	Siu-Lam Lee
Chemistry	(Also see CyberEd course listings on page 7.)						
	84.111-011	General Chemistry I	M-Th	11:00 am-1:20 pm	3	SL	Judith Goldsberry
	84.113-011	General Chemistry Lab I	M/W/Th	2:00-5:30 pm	1 (3)	C: 84.111; SL	Paul Damour
	84.121-011	Chemistry I	M/W	6:30-10:00 pm	3	P: Science, Engineering and Engineering Technology majors only; others with department permission; C: 84.123; SL	Department Faculty
	84.122-011	Chemistry II	T/Th	6:30-10:00 pm	3	P: 84.121; Science, Engineering and Engineering Technology majors only; others with department permission; C: 84.124; SL	Judith Goldsberry
	84.123-011	Chemistry Lab I	T/Th	6:30-10:00 pm	1 (3)	C: 84.121; SL	Paul Damour
	84.124-011	Chemistry Lab II	M/W	6:30-10:00 pm	1 (3)	P: 84.123; C: 84.122; SL	Department Faculty
	84.221-011	Organic Chemistry I	M-Th	11:00 am-1:20 pm	3	P: 84.122, 84.124; C: 84.229; SL	William Bannister
	84.229-011	Organic Chemistry Lab I	M/W/Th	2:00-6:00 pm	1 (4)	C: 84.221; SL	Judith Freeman
	86.131-011	Environmental Chemistry I	M/W	6:30-10:00 pm	3		Charles Panagiotakos
	86.223-011	Principles of Organic Chemistry I	T/Th	6:30-10:00 pm	3	P: 84.122, 84.124; C: 86.225; SL	Gene Davis
	86.225-011	Principles of Organic Chemistry Lab I	M/W	6:00-10:00 pm	1 (4)	C: 86.223; SL	Judith Freeman
Cinema	52.335-011	Cinema and Italian Americans	M-Th	8:00-10:20 am	3	HV, AE	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	11:00 am-1:20 pm	3	HV, AE	Mario Aste
Civil Engineering	14.203-011	Statics (alternate 22.211)	M-Th	11:00 am-1:20 pm	3	P: 92.132, 95.141	Jennifer Gorczyka
Civil Engineering Technology	15.113-011	CAD	T/Th	6:30-10:00 pm	2 (3)	P: 23.101	Kevin Gagne
	CERTIFICATE IN ENVIRONMENTAL TECHNOLOGY (See page 4 for required courses.) CERTIFICATE IN LAND SURVEYING (See website for required courses.)						
Civil Engineering Technology: Water/Wastewater Option	CERTIFICATE IN HAZARDOUS WASTE MANAGEMENT (See page 5 for required courses.) CERTIFICATE IN WATER TREATMENT (See page 5 for required courses.) CERTIFICATE IN WASTEWATER TREATMENT (See page 5 for required courses.)						
Client/Server Technology	(See courses listed under Information Technology.) CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)						

ACADEMIC CREDIT COURSE LISTING

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Computer Mathematics	(See courses listed under Information Technology.)						
Computer Science (see also Information Technology)	(Also see CyberEd course listings on page 7.)						
	91.301-491	Organization of Programming Languages (14 weeks; Held at Westborough)	Th	5:00-8:00 pm	3	P: 91.250 or equivalent	Krishnan Seetharaman
	91.305-021	Computer Architecture (14 weeks)	T	5:00-8:00 pm	3	P: 91.203, 91.102	David Hendrickson
	91.305-022	Computer Architecture (14 weeks)	W	5:00-8:00 pm	3	P: 91.203, 91.102	David Hendrickson
	91.404-021	Analysis of Algorithms (14 weeks)	T	5:30-8:30 pm	3	P: 91.204, 92.322	Urska Cvek
	91.404-022	Analysis of Algorithms (14 weeks)	W	5:30-8:30 pm	3	P: 91.204, 92.322	Urska Cvek
Criminal Justice (see also Paralegal Studies)	44.141-011	Police Process	M/W	6:00-9:30 pm	3		Richard Stanley
	44.201-011	Computer Applications for Criminal Justice	M/W	6:00-9:30 pm	3	P: 44.101	Douglas Morrow
	44.342-011	Criminal Profiling	M/W	2:00-5:30 pm	3		Thomas Diskin
	44.380-011	Selected Issues: Organized Crime	T/Th	6:00-9:30 pm	3		Charles Wilson
	44.381-011	Ethics in Criminal Justice	T/Th	6:00-9:30 pm	3		Ronald Guilmette
	44.496-011	Criminal Justice Practicum	TBA	TBA	3	P: Instructor permission	Allan Roscoe
	CERTIFICATE IN COMMUNITY POLICING (See website for required courses.)						
	CERTIFICATE IN PARALEGAL STUDIES (See website for required courses.)						
Economics	(Also see CyberEd course listings on page 7.)						
	49.201-011	Economics I (Microeconomics)	M-Th	11:00 am-1:20 pm	3	P: 90.111; BS	Department Faculty
	49.201-012	Economics I (Microeconomics)	M/W	6:00-9:30 pm	3	P: 90.111; BS	Rudolph Matty
	49.202-011	Economics II (Macroeconomics)	T/Th	6:00-9:30 pm	3	BS	Patricia Machado
	49.211-011	Statistics I	M-Th	8:00-10:20 am	3	P: 92.122 or equivalent	Department Faculty
	49.211-012	Statistics I	T/Th	6:00-9:30 pm	3	P: 92.122 or equivalent	Rudolph Matty
Electrical and Computer Engineering	16.311-011	Electronics I Lab	T/Th	4:00-7:00 pm	2 (3)	P: 16.202; C: 16.365	Alan Rux
	16.311-012	Electronics I Lab	T/Th	6:30-10:00 pm	2 (3)	P: 16.202; C: 16.365	Alan Rux
	16.312-011	Electronics II Lab	M/W	4:00-7:00 pm	2 (3)	P: 16.311; C: 16.366	Alan Rux
	16.360-011	Electromagnetic Theory	M-Th	7:00-9:20 pm	3	P: 16.202, 92.234	Dikshitulu Kalluri
	16.364-011	Engineering Mathematics	T/Th	6:00-9:00 pm	3	P: 92.234, 16.201	A. J. Noushin
	16.409-011	Directed Studies	TBA	TBA	3	P: Department Faculty permission	Ziyad Salameh
	16.491-011	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
	16.492-011	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
	16.493-011	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
Electronic Engineering Technology	17.130-011	Electrical Basics and Laboratory	T/Th	6:30-10:00 pm	2 (3)	P: 42.226, 90.267, 99.132	Jan Yang
	CERTIFICATE IN ELECTRONICS TECHNOLOGY (See page 4 for required courses.)						
	CERTIFICATE IN ELECTRO-OPTICS (See website for required courses.)						
	CERTIFICATE IN SEMICONDUCTOR MANUFACTURING (See website for required courses.)						
	CERTIFICATE IN COMPUTER ENGINEERING TECHNOLOGY (See page 4 for required courses.)						
English	(Also see CyberEd course listings on page 7.)						
	42.101-011	College Writing I	M-Th	8:00-10:20 am	3		William Coughlin
	42.101-012	College Writing I	M/W	6:30-10:00 pm	3		Oliver Ford
	42.102-011	College Writing II	M-Th	11:00 am-1:20 pm	3	P: 42.101	William Coughlin
	42.102-012	College Writing II	T/Th	6:30-10:00 pm	3	P: 42.101	Bridget Driscoll
	42.103-011	College Writing I for International Students	T/Th	6:30-10:00 pm	3		C. Mahadeswaraswamy
	42.212-011	The Short Story	M-Th	8:00-10:20 am	3	P: 42.102; LT	Anthony Szczesiul
	42.217-011	Horror Story	M-Th	Noon-2:00 pm	3	P: 42.102; LT	Lucilia Valerio
	42.226-011*	Technical and Scientific Communication	T/Th	6:30-10:00 pm	3	P: 42.102	Peter Payack
	42.232-011	Turning Fiction into Film	M/W	6:30-10:00 pm	3	P: 42.102	Dina Bozicas
	42.267-011	Introduction to Shakespeare	M-Th	11:00 am-1:20 pm	3	P: 42.102; LT	William Hersey
	42.282-011	Crime in Literature	M-Th	8:00-10:20 am	3	P: 42.102; LT	William Hersey
	42.294-011	History of American Literature I	M-Th	11:00 am-1:20 pm	3	P: 42.102; LT	Anthony Szczesiul
	42.302-011	Creative Writing: Fiction	M/W	6:30-10:00 pm	3	P: 42.102	Jay Atkinson
	42.303-011	Creative Writing: Poetry	T/Th	6:00-9:30 pm	3	P: 42.102	Gregoire Turgeon
	42.403-021	Advanced Software Writing (12 weeks; no Fridays)	T	6:30-10:00 pm	3	P: 42.102	Stephen Murphy
	*Please note that students may not receive credit for both 42.224 and 42.226						
	CERTIFICATE IN TECHNICAL WRITING (See website for required courses.)						
Environmental Science	87.115-011	Astronomy	T/Th	6:30-10:00 pm	3	C: 87.117	Arnold O'Brien
	87.117-011	Astronomy Lab	M/W	6:30-8:30 pm	1 (2)	C: 87.115	Arnold O'Brien
Graphic Design and Digital Imaging	(See courses listed under Art and Information Technology.)						
	CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 3 for required courses.)						
Health Professions	(Also see CyberEd course listings on page 7.)						
	30.306-011	Introduction to Gerontology	T/Th	11:00 am-1:20 pm	3	BS	Judith Antonangeli
	30.315-011	Kinesiology and Lab	M-F	11:00 am-1:20 pm	4	P: All freshmen, sophomore E.P. courses and 1 yr. of A.P. and 1 yr. of Physics	Joseph Dorsey
	35.101-011	Human Anatomy and Physiology I	T/Th	6:00-9:30 pm	3	C: 35.103; SL	Paul Fierimonte
	35.103-011	Human Anatomy and Physiology I Lab	T/W/Th	2:00-5:20 pm	1 (3)	C: 35.101; SL	Lauren Dirk
	35.206-011	Human Nutrition	T/Th	6:00-9:30 pm	3		Paul Fierimonte
	35.211-011	Basic Clinical Microbiology and Pathology	M-Th	9:00-11:20 am	3	P: 35.102, 35.104; C: 35.213; SL	Jacob Lam
	35.213-011	Basic Clinical Micro. and Pathology Lab	M/T/W	Noon-3:20 pm	1 (3)	P: 35.102, 35.104; C: 35.211; SL	Jacob Lam
	35.356-011	Pharmacology	M-Th	8:00-10:20 am	3	P: Junior level	Arthur Vergados
	36.350-011	Human Biochemistry	M-Th	11:00 am-1:20 pm	3	P: 35.252 or equivalent	Thomas Wilson
	CERTIFICATE IN NUTRITION (See website for required courses.)						
History (see also NEW Art History)	(Also see CyberEd course listings on page 7.)						
	43.317-011	The Dynamics of Sexual Politics	M-Th	11:00 am-1:20 pm	3	HS	Dean Bergeron
	43.365-011	U.S. Since 1960	T/Th	6:00-9:30 pm	3	HS	Stephen Russell
	43.237-011	Europe in the Twentieth Century	M-Th	9:00-11:20 am	3	HS	Barbara McCahill
Information Technology (including Multimedia and Computer Graphics)	(Also see CyberEd course listings on page 7.)						
	Please note that a number of courses with a 92 prefix have now been renumbered with a 90 prefix.						
	90.160-011	Introduction to Information Systems	T/Th	4:00-7:30 pm	3		Adrianna Morris
	90.171-011	Applications Software: Access	T/Th	6:00-9:30 pm	3		Department Faculty
	90.202-011	Introduction to PCs and MS Office	T/Th	6:00-9:30 pm	3		Terry Bass
	90.202-012	Introduction to PCs and MS Office	M/W	6:00-9:30 pm	3		Robin Desmond
	90.211-011*	Intro. to Programming with C I	M/W	6:30-10:00 pm	3		Department Faculty
	90.211-012*	Intro. to Programming with C I	M/W	6:30-10:00 pm	3		Fuquan Gao
	90.212-011	Intro. to Programming with C II	M/W	6:30-10:00 pm	3	P: 90.211	Lisa Panagopoulos
	90.212-012	Intro. to Programming with C II	T/Th	6:30-10:00 pm	3	P: 90.211	Department Faculty
	90.220-011	Visual Basic	T/Th	6:30-10:00 pm	3	Windows and working knowledge of a high-level language	John Pesce
	90.220-012	Visual Basic	M/W	6:30-10:00 pm	3	Windows and working knowledge of a high-level language	Arthur Chadbourne

ACADEMIC CREDIT COURSE LISTING

No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
90.230-011	Intro. to Multimedia/Windows	M/W	6:30-10:00 pm	3		Chris Perry
90.231-011	Graphics for Multimedia and the World Wide Web/Windows	T/Th	6:30-10:00 pm	3	P: 90.230	Marina Javis
90.233-021	Multimedia Authoring Software: Director/Windows (12 weeks; no Fridays)	T	7:00-10:30 pm	3	P: 90.230	Beatrice Lee
90.234-021	Designing and Developing Interactive Media (12 weeks; no Fridays)	W	6:30-10:00 pm	3	P: 90.230, 90.231, 90.232, or instructor permission	Rain Breaw
90.238-021	Web Development: FrontPage/Windows (12 weeks; 1 Friday mtg: 6/15)	Th	7:00-10:30 pm	3	P: 90.291; 90.231 recommended	Nancy Peaslee
90.238-022	Web Development: FrontPage/Windows (12 weeks; no Fridays)	M	6:00-9:30 pm	3	P: 90.291; 90.231 recommended	Department Faculty
90.247-021	Advanced Web Authoring: Flash/Mac (12 weeks; no Fridays)	M	6:30-10:00 pm	3	P: 90.291; 90.302 or programming familiarity helpful	Department Faculty
90.267-011*	C Programming	M/W	6:00-9:30 pm	3	P: previous programming experience	Lee Clark
90.267-012*	C Programming	T/Th	6:00-9:30 pm	3	P: previous programming experience	Nancy Kiernan
90.267-013*	C Programming	T/Th	6:30-10:00 pm	3	P: previous programming experience	Timothy Niesen
90.267-041*	C Programming	T/Th	5:00-8:30 pm	3	P: previous programming experience	Fuquan Gao
90.268-041	C++ Programming (Held at Veterans Administration Medical Center, Bedford, MA)	M/W	5:00-8:30 pm	3	P: 90.267 or 90.212	Justin Seiferth
90.270-011	Visual C++	M/W	6:30-10:00 pm	3	P: 90.268	Barbara Bancroft
90.291-011	Introduction to HTML	M/W	6:30-10:00 pm	3		David Sciuto
90.291-041	Introduction to HTML (Held at Hanscom Air Force Base, Bedford, MA)	T/Th	5:00-8:30 pm	3		Janine Jacques
90.292-011	Advanced HTML	T/Th	6:30-10:00 pm	3	P: 90.291	David Sciuto
90.301-011	Java Programming/Windows	T/Th	6:00-9:30 pm	3	P: 90.268 or 90.297	Elizabeth Carbone
90.303-021	Advanced Java Programming (12 weeks)	Sat	9:00 am-12:30 pm	3	P: 90.301	Siva Ghatti
90.311-011	Introduction to the UNIX Operating System	T/Th	6:30-10:00 pm	3		Andrew Garside
90.311-012	Introduction to the UNIX Operating System	M/W	6:30-10:00 pm	3		Partha Mittra
90.312-011	UNIX Shell Programming	M/W	6:30-10:00 pm	3	P: 90.311, and 90.212 or 90.267	Sean McGowan
90.319-011	Introduction to Linux	M/W	6:30-10:00 pm	3		T. Michael Cummings
90.360-011	Introduction to Data Structures Using C	T/Th	6:30-10:00 pm	3	P: 90.267 or 90.212, and 90.364	Dan Leach
90.360-021	Introduction to Data Structures/C (12 weeks)	Th	6:30-10:00 pm	3	P: 90.267 or 90.212, and 90.364	Siva Ghatti
92.363-011	Introduction to Data Analysis	M-Th	11:00 am-1:20 pm	3	P: 92.183 or equivalent	Alexander Olsen
90.443-011	Fundamentals of Client/Server Computing	M/W	6:30-10:00 pm	3		Department Faculty
90.454-011	Introduction to PL/SQL	T/Th	6:30-10:00 pm	3	P: 90.474	Jeffrey Yang
90.461-011	LAN/WAN Technologies	M/W	6:30-10:00 pm	3	P: 90.267 or previous prog. experience	Department Faculty
90.462-041	TCP/IP and Network Architecture (Held at Veterans Administration Medical Center, Bedford, MA)	M/W	5:00-8:30 pm	3	P: 90.461	Tom Stephenson
90.463-011	Advanced Networking Technology	T/Th	6:30-10:00 pm	3	P: 90.461	Department Faculty
90.464-011	Network Management	M/W	6:00-9:30 pm	3	P: 90.461 or 90.472	Jaime Fernandez
90.474-011	Relational Database Concepts	M/W	6:00-9:30 pm	3	P: 90.267	Paul Giguere

*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence.

CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)

CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 5 for required courses.)

CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 4 for required courses.)

CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.)

CERTIFICATE IN INTRANET DEVELOPMENT (See page 4 for required courses.)

CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 3 for required courses.)

CERTIFICATE IN UNIX (See page 4 for required courses.)

CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.)

Interactive Game Design	(See courses listed under Art and Information Technology.) CERTIFICATE IN INTERACTIVE GAME DESIGN (See website for required courses.)					
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Languages	50.211-011	Intermediate Conversational French I	M-Th	8:00-10:20 am	3		Department Faculty
	52.335-011	Cinema and Italian Americans	M-Th	8:00-10:20 am	3	HV, AE	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	11:00 am-1:20 pm	3	HV, AE	Mario Aste
	54.101-011	Beginning Spanish I	M-Th	8:00-10:20 am	3		J. Heli Hernandez
	54.101-012	Beginning Spanish I	M/W	6:30-10:00 pm	3		Margot Girodet
	54.211-011	Intermediate Conversational Spanish I	M-Th	11:00 am-1:20 pm	3	P: 54.102 or equivalent	J. Heli Hernandez
	54.211-012	Intermediate Conversational Spanish I	T/Th	6:30-10:00 pm	3	P: 54.102 or equivalent	Department Faculty
	CERTIFICATE IN SPANISH (See website for required courses.)						

Legal Studies (see also Paralegal Studies) <i>NEW</i>	41.262-011	Introduction to Business Law	T/Th	6:30-10:00 pm	3	BS, Collateral to Criminal Justice	J. Alan Roberts
	41.363-011	Corporate and Property Law	T/Th	6:30-10:00 pm	3		Eugene Reardon
	41.376-011	Family Law	M/W	6:30-10:00 pm	3		Russell Karl
	41.394-011	Ancient Legal Systems	M/W	6:30-10:00 pm	3		Robert Yelle
	CERTIFICATE IN PARALEGAL STUDIES (See website for required courses.)						

Management		(Also see CyberEd course listings on page 7.)					
61.301-011	Business Finance	T/Th	6:00-9:30 pm	3	P: BSBA students and College of Management Dean permission	Frank Andrews	
62.201-011	Marketing Principles	M/W	6:00-9:30 pm	3	P: 47.101, 48.101, 49.201	Michael Mullen	
63.210-011	Operations Analysis	M/W	7:30-11:00 am	3	P: 49.211	M. Riaz Khan	
66.490-011	Strategic Management	M/W	9:00-12:30 pm	3	P: 61.301, 62.201, 63.371, 66.301, and 96 credits; BSBA students and College of Management Dean permission; priority for Summer 2001 graduates	Louis Zivic	

NOTE: Courses with the 69 prefix are not intended for matriculating University of Massachusetts Lowell day students and will not transfer into the College of Management day programs.

Mathematics (see also Information Technology)	(Also see CyberEd course listings on page 7.)						
	90.111-011*	Fundamentals of Algebra	T/Th	6:30-10:00 pm	3		Anthony Sokolowski
	92.111-011	Quantitative Reasoning (formerly Math Perspectives)	M-Th	11:00 am-1:20 pm	3	Liberal Arts majors; MA	Stanley Spiegel
	92.121-011**	Precalculus Mathematics I	M-Th	8:00-10:20 am	3	P: 90.111 or equivalent or placement exam;*** MA; course is not a substitute for 92.127	Alan Kaplan
	92.121-012**	Precalculus Mathematics I	T/Th	6:00-9:30 pm	3	P: 90.111 or equivalent or placement exam;*** MA; course is not a substitute for 92.127	Candice Weston
	92.122-011	Management Calculus	M-Th	11:00 am-1:20 pm	3	P: 92.121; MA	Alan Kaplan
	92.122-012	Management Calculus	M/W	6:00-9:30 pm	3	P: 92.121; MA	Department Faculty
	92.123-011	Precalculus Mathematics II	M/W	6:00-9:30 pm	3	P: 90.121; MA	Robert Johnson
	92.125-011	Calculus A	T/Th	6:00-9:30 pm	3	P: 92.123; MA; for Cont. Ed. students only	Robert Gravina
	92.126-011	Calculus B	M/W	6:00-9:30 pm	3	P: 92.125; MA; for Cont. Ed. students only	Theresa Schille
	92.131-021	Calculus I (12 weeks)	M/W/F	10:00 am-Noon	4	MA	Marvin Stick
	92.131-022	Calculus I (12 weeks)	M/W/F	8:00-10:00 am	4	MA	John Lahoud
	92.132-021	Calculus II (12 weeks)	M/W/F	8:00-10:00 am	4	P: 92.131; MA	Marvin Stick
	92.132-022	Calculus II (12 weeks)	M/W/F	10:00 am-Noon	4	P: 92.131; MA	Department Faculty
	92.183-011	Introduction to Statistics	M-Th	8:00-10:20 am	3	P: 90.111 or equivalent; MA	Alexander Olsen

ACADEMIC CREDIT COURSE LISTING

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
	92.183-012	Introduction to Statistics	T/Th	6:00-9:30 pm	3	P: 90.111 or equivalent; MA	Department Faculty
	92.225-011	Calculus C	T/Th	6:00-9:30 pm	3	P: 92.126; MA; for Cont. Ed. students only	Philip Breen
	92.231-011	Calculus III	M-F	11:00 am-1:20 pm	4	P: 92.132; MA	Rida Mirie
	92.234-011	Differential Equations	M-Th	8:00-10:20 am	3	P: 92.132 or 92.225; MA	Vidhu Prasad
	92.234-012	Differential Equations	T/Th	6:30-10:00 pm	3	P: 92.132 or 92.225; MA	Rida Mirie
	92.310-011	Introduction to Chaos and Dynamical Systems	M/W	3:15-6:45 pm	3	P: A thorough knowledge of the Calculus sequence and familiarity and comfort with proofs in mathematics	Vidhu Prasad
	92.321-011	Discrete Structures I	T/Th	3:15-6:45 pm	3	P: 90.112 or 92.121	Department Faculty
	92.363-011	Introduction to Data Analysis	M-Th	11:00 am-1:20 pm	3	P: 92.183 or equivalent	Alexander Olsen
	92.386-011	Statistics for Engineering and Science	M/W	6:00-9:30 pm	3	P: 92.225 or 92.231	Lee Jones
	92.407-011	Probability and Mathematical Statistics I	M/W	6:00-9:30 pm	3	P: 92.225 or 92.232	Lee Jones
	*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell.						
	**Students will not receive credit for both 90.112 and 92.121. For students in the Information Systems program, 92.121 can be substituted for the combination of 90.112 and 90.119.						
	***Placement exam is given the first evening of class.						
	Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Refer to the Graduate School listing and contact the Graduate School for admissions procedures. University of Massachusetts Lowell day students must have approval from their Department Chair before taking courses with a 90 prefix.						
Mechanical Engineering	22.211-011	Statics (alternate 14.203)	M-Th	11:00 am-1:20 pm	3	P: 92.132, 95.141	Jennifer Gorczyca
	22.403-011	M.E. Lab II: Measurement Engineering	T/Th	3:00-7:15 pm	3 (4)	P: 22.302, 22.311, 22.341, 22.381	Glen Bousquet
Mechanical Engineering Technology and Manufacturing Option	23.200-011	CADrf CERTIFICATE IN COMPUTER-ASSISTED MANUFACTURING (See page 4 for required courses.) CERTIFICATE IN MANUFACTURING TECHNOLOGY (See website for required courses.) CERTIFICATE IN QUALITY ASSURANCE (See website for required courses.)	M/W	6:30-10:00 pm	3	P: 23.101	Norman Truscott
Multimedia Applications	(See offerings under Art, Information Technology, and Computer Science.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 3 for required courses.)						
Music	For Summer Music Education Program, see page 5.						
	71.102-011	Music Theory 2	M-Th	8:00-10:20 am	3	P: 71.101	Lisa Cleveland
	71.104-011	Aural Skills 2	M-Th	11:00 am-12:45 pm	1 (2)	P: 71.103	Mark Peterson
	71.110-011	Basic Music Theory	M/W	6:30-10:00 pm	3	Non-Music majors; AE	Department Faculty
	71.201-011	Music Theory 3	M-Th	8:00-10:20 am	3	P: 71.102	Mark Peterson
	71.203-011	Aural Skills 3	M-Th	11:00 am-12:45 pm	1 (2)	P: 71.104	Lisa Cleveland
	74.261-011	Survey of Music History 1	M-Th	8:00-10:20 am	3		John Ogasapian
	77.499-021	Music Business Internship (14 weeks)	TBA	TBA	3	P: Permission of Chair	William Moylan
	78.493-021	Internship in Sound Recording Technology (14 weeks)	TBA	TBA	6	P: Permission of Chair	William Moylan
Paralegal (see also Legal Studies and Criminal Justice)	41.363-011	Corporate and Property Law	T/Th	6:30-10:00 pm	3		Eugene Reardon
	41.376-011	Family Law	M/W	6:30-10:00 pm	3		Russell Karl
	44.497-011	Paralegal Practicum	TBA	TBA	3	P: minimum of 3 paralegal courses and permission of Chair; call (978) 934-2765	Department Faculty
	CERTIFICATE IN PARALEGAL STUDIES (See website for required courses and admission requirements.)						
Philosophy	45.201-011	Introduction to Philosophy	T/Th	6:00-9:30 pm	3	VC, HV	Thomas Hersey
	45.201-012	Introduction to Philosophy	M-Th	8:00-10:20 am	3	VC, HV	Donald LeBlanc
	45.202-011	Introduction to Logic	T/Th	6:30-10:00 pm	3	VC, HV	Peter Skagestad
	45.203-011	Introduction to Ethics	M/W	6:30-10:00 pm	3	VC, HV	Tracey Stark
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 5 for required courses.)						
Physics	95.103-011	General Physics I	M-Th	8:00-10:20 am	3	P: Algebra; C: 96.103; SL	Arthur Mittler
	95.141-011	Physics I	M-F	8:00-10:20 am	3 (4)	C: 92.131, 96.141; SL	F. Raymond Hardy
	95.144-011	Physics II	M-F	8:00-10:20 am	3 (4)	P: 95.141; C: 92.132, 96.144; SL	Kunnat Sebastian
	96.103-011	Experimental General Physics I (2 days/week)	T/Th	2:00-5:00 pm	1 (2)	C: 95.103 or 95.201; SL	Arthur Mittler
	96.141-011	Experimental Physics I (2 days/week)	M/W	2:00-5:00 pm	1 (2)	C: 95.141; SL	F. Raymond Hardy
	96.144-011	Experimental Physics II (2 days/week)	T/Th	2:00-5:00 pm	1 (2)	P: 96.141; C: 95.144; SL	David Pullen
	99.102-011	Radiation and Life Lab	T/Th	2:00-5:00 pm	1 (2)	C: 99.101; SL	Anthony Stevens
Plastics	27.451-011	Selected Topics I	M/W	6:30-10:00 pm	3	P: Coordinator permission	Department Faculty
	27.453-011	Selected Topics III	T/Th	6:30-10:00 pm	3	P: Coordinator permission	Department Faculty
	Note: Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY (See website for required courses.)						
Political Science NEW NEW	46.101-011	Introduction to American Politics	M/W	6:30-10:00 pm	3	BS	Francis Talty
	46.230-011	Law and the Legal System	T/Th	7:00-10:00 pm	3		P. Sullivan Talty
	46.316-011	Politics and Film	M-Th	11:00 am-1:20 pm	3		Jeffrey Gerson
	46.327-011	The Dynamics of Sexual Politics	M-Th	11:00 am-1:20 pm	3		Dean Bergeron
Psychology	(Also see CyberEd course listings on page 7.)						
	47.101-011	General Psychology	T/Th	6:30-10:00 pm	3	BS	Alexandria Weida
	47.209-011	Social Psychology	M/W	6:30-10:00 pm	3	Human Values, BS	Reuben Russell
	47.260-011	Human Development I	M/W	6:00-9:30 pm	3	BS	Doreen Arcus
	47.272-011	Abnormal Psychology	T/Th	6:00-9:30 pm	3		John Bayliss
	47.328-011	Dynamics of Interpersonal Relations	M/W	6:00-9:30 pm	3		Noel Cartwright
	47.361-011	Problem and Issues in Childhood and Adolescence	T/Th	6:30-10:00 pm	3	P: 47.101	S. McLaughlin-Beltz
	47.373-011	Brain, Mind and Behavior	M-Th	8:00-10:20 am	3	P: 47.101	Mary Duell
	47.475-011	Seminar: Clinical Psychology	M/W	2:15-5:35 pm	3	P: 47.272 or instructor permission	Peter Hantzis
Radiological Science	(See Physics.)						
Regional Economic and Social Development	57.475-011	Community Conflict Resolution	T/Th	6:30-10:00 pm	3		David Turcotte
Sociology	(Also see CyberEd course listings on page 7.)						
	48.101-011	Introduction to Sociology	M-Th	8:00-10:20 am	3	BS	Levon Chorbajian
	48.260-011	Sociology of Mass Media	T/Th	6:30-10:00 pm	3	P: 48.101	Levon Chorbajian
	48.321-011	Social Theory I	M/W	6:30-10:00 pm	3	P: 48.101	Jack Porter

ACADEMIC CREDIT COURSE LISTING

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Technical Writing	42.403-021	Advanced Software Writing (12 weeks; no Fridays) Technical Writing courses are open to undergraduate and graduate students. CERTIFICATE IN TECHNICAL WRITING (See website for required courses.)	T	6:30-10:00 pm	3	P: 42.402	Stephen Murphy
Water/Waste-water Option		(See Civil Engineering Technology: Water/Wastewater Option.) CERTIFICATE IN WASTEWATER TREATMENT (See page 5 for required courses.) CERTIFICATE IN WATER TREATMENT (See page 5 for required courses.)					
Website Design and Development		(See courses under Art and Information Technology.) CERTIFICATE IN WEB DESIGN AND DEVELOPMENT (See page 3 for required courses.)					

July 9–August 17
Summer Session II

Day Classes begin on July 9 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.
M/W Evening Classes begin on July 9 and include 2 FRIDAYS: July 13 and July 27 at the regularly scheduled hours.
T/Th Evening Classes begin on July 10 and include 2 FRIDAYS: July 20 and August 3 at the regularly scheduled hours.

Reminder: this course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Accounting	(Also see CyberEd course listings on page 7.) 60.202-021 60.331-021	Accounting/Managerial Cost Management Systems	M-Th T/Th	8:00-10:00 am 7:00-10:00 pm	3 3	P: 60.201 or 67.102 P: 60.202, BSBA (non-Accounting students and College of Management Dean permission)	Harry Sauter Paul Brown
		CERTIFICATE IN ACCOUNTING (See website for required courses.)					
Art/Computer Graphics		(Also see Information Technology for additional Multimedia and Web Development course offerings.) (See listings under Summer I for 12-week offerings.) CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 3 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.) CERTIFICATE IN INTERACTIVE GAME DESIGN (See website for required courses.)					
Art History <i>NEW</i>	(Also see CyberEd course listings on page 7.) 58.101-021 58.205-021 58.494-021	Art Appreciation Studies in World Art: Native American Art Directed Studies	T/Th M-Th TBA	7:00-10:00 pm 10:30 am-12:30 pm TBA	3 3 3	AE/Cultural Diversity AE/HS HSA	Charles Giuliano Cynthia Fowler Liana Cheney
Biological Sciences <i>NEW</i>	82.205-021 83.214-021	Genetics for the Computer Scientist and Mathematician Human Ecology	T/Th M-Th	6:00-9:00 pm 10:30 am-12:30 pm	3 3	 SL	James Lyons-Weiler Priscilla Mattson
Chemistry	84.112-021 84.114-021 84.122-021 84.122-022 84.124-021 84.222-021 84.230-021 86.132-021 86.224-021 86.226-021	General Chemistry II General Chemistry II Lab Chemistry II Chemistry II Chemistry Lab II Organic Chemistry II A Organic Chemistry Lab II A Environmental Chemistry II Principles of Organic Chemistry II Principles of Organic Chemistry Lab II	M-Th M/W/Th M/W M-T T/Th M-Th M/W/Th M/W T/Th M/W	10:30 am-12:30 pm 2:00-5:00 pm 7:00-10:00 pm 2:00-5:00 pm 7:00-10:00 pm 10:30 am-12:30 pm 2:00-6:00 pm 7:00-10:00 pm 7:00-10:00 pm 6:00-10:00 pm	3 1 (3) 3 3 1 (3) 3 1 (4) 3 3 3 1 (4)	P: 84.111; SL P: 84.113; C: 84.112; SL P: 84.121; Science, Engineering and Engineering Technology majors only; others with department permission; C: 84.124; SL P: 84.121; Science, Engineering and Engineering Technology majors only; others with department permission; C: 84.124; SL P: 84.123; C: 84.122; SL P: 84.221; C: 84.230; SL P: 84.229; C: 84.222; SL P: 86.131; SL P: 86.223; C: 86.226; SL P: 86.225; C: 86.224; SL	Department Faculty Athena Letsou Judith Goldsberry Paul Damour Paul Damour Gene Davis Judith Freeman Charles Panagiotakos Gene Davis Judith Freeman
Cinema	52.374-021 52.380-021	Classics of Italian Cinema Italian Cinema: Directors and Themes	M-Th M-Th	10:30 am-12:30 pm 8:00-10:00 am	3 3	HV, AE HV, AE	Mario Aste Mario Aste
Civil Engineering	14.204-021 14.205-021	Strength of Materials (alternate 22.212) Dynamics (alternate 22.213)	T/Th M/W	10:30 am-12:30 pm 7:00-10:00 pm	3 3	P: 14.203 P: 14.203, 92.132	Jennifer Gorczyka Fuquan Gao
Civil Engineering Technology		CERTIFICATE IN ENVIRONMENTAL TECHNOLOGY (See page 4 for required courses.) CERTIFICATE IN LAND SURVEYING (See website for required courses.)					
Civil Engineering Technology: Water/Wastewater Option		CERTIFICATE IN HAZARDOUS WASTE MANAGEMENT (See page 5 for required courses.) CERTIFICATE IN WATER TREATMENT (See page 5 for required courses.) CERTIFICATE IN WASTEWATER TREATMENT (See page 5 for required courses.)					
Computer Science (see also Information Technology)	(Also see CyberEd course listings on page 7.) (See listings under Computer Science in Summer I for additional 14-week offerings.) 91.113-021	Exploring the Internet	T/Th	7:00-10:00 pm	3		Department Faculty
Criminal Justice (see also Paralegal Studies)	44.101-021 44.251-021 44.261-021 44.496-021	Introduction to Criminal Justice Institutional Corrections Juvenile Delinquency Practicum	T/Th M/W M/W TBA	6:00-9:00 pm 7:00-10:00 pm 6:00-9:00 pm TBA	3 3 3 3	P: Instructor permission	Claire Murphy Carol Higgins Steven Sacco Allan Roscoe
		CERTIFICATE IN COMMUNITY POLICING (See website for required courses.) CERTIFICATE IN PARALEGAL STUDIES (See website for required courses.)					

ACADEMIC CREDIT COURSE LISTING

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Economics	49.201-021	Economics I (Microeconomics)	M-Th	8:00-10:00 am	3	BS	Department Faculty
	49.201-022	Economics I (Microeconomics)	M/W	6:00-9:00 pm	3	BS	Rudolph Matty
	49.202-021	Economics II (Macroeconomics)	T/Th	7:00-10:00 pm	3	BS	Patricia Machado
	49.211-021	Statistics I	M-Th	10:30-12:30 pm	3	P: 92.122 or equivalent; BS	Department Faculty
	49.212-021	Statistics II	T/Th	6:00-9:00 pm	3	P: 49.211; BS	Rudolph Matty
Electrical and Computer Engineering	16.312-021	Electronics II Laboratory	T/Th	4:00-7:00 pm	3	P: 16.311; C: 16.366	Alan Rux
	16.312-022	Electronics II Laboratory	T/Th	7:00-10:00 pm	3	P: 16.311; C: 16.366	Alan Rux
	16.491-021	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
	16.492-021	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
	16.493-021	Industrial Experience	TBA	TBA	3	P: Permission by Alan Rux	Alan Rux
English	(Also see CyberEd course listings on page 7.)						
	42.101-021	College Writing I	M/W	7:00-10:00 pm	3		Mary Hojnacki
	42.102-021	College Writing II	M-Th	10:30 am-12:30 pm	3	P: 42.101	Oliver Ford
	42.102-022	College Writing II	T/Th	7:00-10:00 pm	3	P: 42.101	Department Faculty
	42.104-021	College Writing II for International Students	M/W	7:00-10:00 pm	3	P: 42.103	C. Mahadeswaraswamy
	42.212-021	The Short Story	M-Th	8:00-10:00 am	3	P: 42.102; LT	Dina Bozicas
	42.217-021	The Horror Story	T/Th	7:00-10:00 pm	3	P: 42.102; LT	Henry Venuti
	42.224-021*	Business Writing	M/W	6:00-9:00 pm	3	P: 42.102	Jeffrey Evangelista
	42.232-021	Fiction Into Film	M/W	7:00-10:00 pm	3		Jeannie Lloyd
	42.295-021	History of American Literature II	M-Th	10:30 am-12:30 pm	3	P: 42.102; LT	Henry Venuti
	42.304-021	Creative Writing: Screenwriting	M/W	7:00-10:00 pm	3	P: 42.102	Richard Farrell
	*Please note that students may not receive credit for both 42.224 and 42.226.						
	CERTIFICATE IN TECHNICAL WRITING (See website for required courses.)						
Graphic Design and Digital Imaging	(See courses listed under Art and Information Technology.)						
	CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 3 for required courses.)						
Health Professions	(Also see CyberEd course listings on page 7.)						
	30.305-021	Exercise Physiology Lecture	M-F	8:00-10:00 am	4	P: A. and P., Chemistry; SL	Sean Collins
	30.307-021	Exercise Physiology Lab	M/W/Th	10:30 am-1:30 pm	1 (3)	C: 30.305; SL	Sean Collins
	35.102-021	Human Anatomy and Physiology II	T/Th	6:00-9:00 pm	3	P: 35.101; C: 35.104; SL	Paul Fierimonte
	35.104-021	Human Anatomy and Physiology II Lab	T/W/Th	2:00-5:00 pm	1 (3)	P: 35.103; C: 35.102; SL	Alease Bruce
	CERTIFICATE IN NUTRITION (See website for required courses.)						
History (see also Art History)	(Also see CyberEd course listings on page 7.)						
	43.106-021	The Modern World	M/W	6:00-9:00 pm	3	HS	Alice Walters
	43.112-021	U.S. History Since 1877	T/Th	7:00-10:00 pm	3	HS	Harry Hubbard
	43.314-021	U.S. Social History Since 1880	M/W	7:00-10:00 pm	3	HS	Robert Lemire
Information Technology (including Multimedia and Computer Graphics)	(Also see CyberEd course listings on page 7.)						
	Please note that a number of courses with a 92 prefix have now been renumbered with a 90 prefix.						
	90.160-021	Introduction to Information Systems	M/W	7:00-10:00 pm	3		Department Faculty
	90.171-021	Applications Software: Access	T/Th	6:00-9:00 pm	3		Department Faculty
	90.202-021	Introduction to PCs & MS Office	M/W	6:00-9:00 pm	3		Adrianna Morris
	90.202-022	Introduction to PCs & MS Office	T/Th	7:00-10:00 pm	3		Department Faculty
	90.211-021*	Introduction to Programming with C	M/W	7:00-10:00 pm	3		Department Faculty
	90.212-021	Introduction to Programming with C II	T/Th	7:00-10:00 pm	3	P: 90.211	Department Faculty
	90.220-021	Visual Basic	T/Th	7:00-10:00 pm	3	P: Windows and working knowledge of a high-level language	Leo Jarvis
	90.220-022	Visual Basic	M/W	7:00-10:00 pm	3	P: Windows and working knowledge of a high-level language	Arthur Chadbourne
	90.267-021*	C Programming	M/W	6:00-9:00 pm	3	P: previous programming experience	Lee Clark
	90.267-022*	C Programming	T/Th	6:00-9:00 pm	3	P: previous programming experience	Nancy Kiernan
	90.268-021	C++ Programming	M/W	7:00-10:00 pm	3	P: 90.267 or 90.212	Department Faculty
	90.268-022	C++ Programming	T/Th	7:00-10:00 pm	3	P: 90.267 or 90.212	Dan Leach
	90.230-021	Introduction to Multimedia/Windows	M/W	7:00-10:00 pm	3		Chris Perry
	90.231-021	Graphics for Multimedia/Windows	T/Th	7:00-10:00 pm	3	P: 90.230	Marina Jarvis
	90.291-021	Introduction to HTML	T/Th	6:00-9:00 pm	3		Janine Jacques
	90.291-022	Introduction to HTML	M/W	6:00-9:00 pm	3		Department Faculty
	90.301-021	Java Programming/Windows	M/W	7:00-10:00 pm	3	P: 90.268 or 90.297	Department Faculty
	90.301-022	Java Programming/Windows	T/Th	6:00-9:00 pm	3	P: 90.268 or 90.297	Elizabeth Carbone
	90.306-021	Introduction to XML	T/Th	7:00-10:00 pm	3	P: Mastery of HTML and familiarity of database	David Sciuto
	90.311-021	Introduction to UNIX Operating System	M/W	7:00-10:00 pm	3	P: 90.267 or 90.211, and 90.364	Partha Mittra
	90.312-021	UNIX Shell Programming	M/W	7:00-10:00 pm	3	P: 90.311	Department Faculty
	90.443-021	Fundamentals of Client/Server Computing	M/W	6:00-9:00 pm	3		Isobel Davis
	90.461-021	LAN/WAN	M/W	7:00-10:00 pm	3	P: 90.267	Department Faculty
	*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence.						
	CERTIFICATE IN CLIENT/SERVER DATABASE DESIGN AND ADMINISTRATION (See page 3 for required courses.)						
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 5 for required courses.)						
	CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 4 for required courses.)						
	CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.)						
	CERTIFICATE IN INTRANET DEVELOPMENT (See page 4 for required courses.)						
	CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 3 for required courses.)						
	CERTIFICATE IN UNIX (See page 4 for required courses.)						
	CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.)						
Interactive Game Design	(See courses listed under Art and Information Technology.)						
	CERTIFICATE IN INTERACTIVE GAME DESIGN (See website for required courses.)						
Languages	50.212-021	Intermediate Conversational French II	M-Th	10:30 am-12:30 pm	3	P: 50.211 or equivalent	Roger Lacerte
	52.374-021	Classics of Italian Cinema	M-Th	10:30 am-12:30 pm	3	VC, AE	Mario Aste
	52.380-001	Italian Cinema: Directors and Themes	M-Th	8:00-10:00 am	3	VC, AE	Mario Aste
	54.102-021	Beginning Spanish II	M-Th	8:00-10:00 am	3	P: 54.101 or equivalent	J. Heli Hernandez
	54.102-022	Beginning Spanish II	M/W	7:00-10:00 pm	3	P: 54.101 or equivalent	Margot Girodet
	54.212-021	Intermediate Conversational Spanish II	M-Th	10:30 am-12:30 pm	3	P: 54.211 or equivalent	J. Heli Hernandez
	54.212-022	Intermediate Conversational Spanish II	T/Th	7:00-10:00 pm	3	P: 54.211 or equivalent	Department Faculty
	CERTIFICATE IN SPANISH (See website for required courses.)						
Legal Studies (see also Paralegal Studies)	41.370-021	Real Estate Law	M/W	7:00-10:00 pm	3		J. Alan Roberts
	41.376-021	Family Law	T/Th	7:00-10:00 pm	3		Russell Karl
	41.381-021	Women and the Law	M/W	7:00-10:00 pm	3		Department Faculty
	41.387-021	Legal Research Methods	T/Th	7:00-10:00 pm	3		Nancy Dick
	CERTIFICATE IN PARALEGAL STUDIES (See website for required courses.) Call 978-934-2765 for more information.						

ACADEMIC CREDIT COURSE LISTING

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Management	(Also see CyberEd course listings on page 7.)						
	61.300-021	Investments	T/Th	6:00-9:00 pm	3	P: College of Management filter courses, BSBA students and College of Management Dean permission	Frank Andrews
	69.276-021	Entrepreneurial Management	T/Th	7:00-10:00 pm	3	Not for BSBA students	Mel Epstein
NOTE: Courses with the 69 prefix are not intended for matriculating University of Massachusetts Lowell day students and will not transfer into the College of Management day programs.							
Mathematics (see also Information Technology)	(Also see CyberEd course listings on page 7.)						
	90.111-021*	Fundamentals of Algebra	M/W	7:00-10:00 pm	3		Eugene Welch, Jr.
	92.121-021**	Precalculus Mathematics I	M-Th	8:00-10:00 pm	3	P: 90.111 or equivalent or placement exam;*** MA; course is not a substitute for 92.127	Department Faculty
	92.121-022**	Precalculus Mathematics I	M/W	7:00-10:00 pm	3	P: 90.111 or equivalent or placement exam;*** MA; course is not a substitute for 92.127	Candice Weston
	92.122-021	Management Calculus	M-Th	10:30 am-12:30 pm	3	P: 92.121; MA	Department Faculty
	92.123-021	Precalculus Mathematics II	T/Th	7:00-10:00 pm	3	P: 90.121; MA	Terence Watterson
	92.125-021	Calculus A	T/Th	7:00-10:00 pm	3	P: 92.123; MA; for Cont. Ed. students only	Department Faculty
	92.126-021	Calculus B	M/W	7:00-10:00 pm	3	P: 92.125; MA; for Cont. Ed. students only	Alan Kaplan
	92.183-021	Introduction to Statistics	M-Th	8:00-10:00 am	3	P: 90.111 or equiv.; MA	Alexander Olsen
	92.183-022	Introduction to Statistics	M/W	7:00-10:00 pm	3	P: 90.111 or equiv.; MA	Alexander Olsen
	92.226-021	Calculus D	M/W	7:00-10:00 pm	3	P: 92.225; MA; for Cont. Ed. students only	Department Faculty
	92.231-021	Calculus III	M-F	10:30 am-12:30 pm	4	P: 92.132; MA	Rida Mirie
	92.234-021	Differential Equations	T/Th	7:00-10:00 pm	3	P: 92.132 or 92.225; MA	Rida Mirie
	92.321-021	Discrete Structures I	M/W	7:00-10:00 pm	3	P: 90.112 or 92.121	Anthony Penta
	92.386-021	Statistics for Science and Engineering	M/W	6:00-9:00 pm	3	P: 92.225 or 92.231	Lee Jones
	92.407-021	Probability and Mathematical Statistics I	M/W	6:00-9:00 pm	3	P: 92.225 or 92.231	Lee Jones
	92.450-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3	P: 92.231	James Graham-Eagle
	*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell.						
	***Placement exam is given the first evening of class.						
	Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Refer to the Graduate School listing and contact the Graduate School for admissions procedures. University of Massachusetts Lowell day students must have approval from their Department Chair before taking courses with a 90 prefix.						
Mechanical Engineering	22.212-021	Strength of Materials (alternate 14.204)	M-Th	10:30 am-12:30 pm	3	P: 22.211	Jennifer Gorczyca
	22.213-021	Dynamics (alternate 14.205)	M/W	7:00-10:00 pm	3	P: 22.211, 92.132	Fuquan Gao
Mechanical Engineering Technology and Manufacturing Option	CERTIFICATE IN COMPUTER-ASSISTED MANUFACTURING (See page 4 for required courses.) CERTIFICATE IN MANUFACTURING TECHNOLOGY (See website for required courses.) CERTIFICATE IN QUALITY ASSURANCE (See website for required courses.)						
Multimedia Applications	(See Computer Mathematics Option and Computer Science.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 3 for required courses.)						
Music	For Summer Music Education Program, see page 5.						
	71.100-021	Fundamentals of Musicianship	M-Th	8:00-10:00 am	3	Music majors only	Mark Peterson
	71.101-021	Music Theory 1	M-Th	10:30 am-12:30 pm	3	Music majors only	Lisa Cleveland
	71.102-021	Music Theory 2	M-Th	10:30 am-12:30 pm	3	P: 71.101, Music majors only	Department Faculty
	71.110-021	Basic Music Theory	M/W	7:00-10:00 pm	3	Non-Music majors; AE	Mark Peterson
	71.202-021	Music Theory 4	M-Th	10:30 am-12:30 pm	3	P: 71.201, Music majors only	Department Faculty
	71.204-021	Aural Skills 4	M-Th	8:00-9:45 am	1 (2)	P: 71.203, Music majors only	Lisa Cleveland
	78.301-021	Music, Technology, and Society	M-Th	10:30 am-12:30 pm	3	Non-Music majors; AE	Alan Williams
Paralegal (see also Legal Studies and Criminal Justice)	41.370-021	Real Estate Law	M/W	7:00-10:00 pm	3		J. Alan Roberts
	41.376-021	Family Law	T/Th	7:00-10:00 pm	3		Russell Karl
	41.387-021	Legal Research Methods	T/Th	7:00-10:00 pm	3		Nancy Dick
	CERTIFICATE IN PARALEGAL STUDIES (See website for required courses.) Call 978-934-2765 with any questions.						
Philosophy	45.201-022	Introduction to Philosophy	M/W	7:00-10:00 pm	3	VC, HV	Donald LeBlanc
	45.203-021	Introduction to Ethics	T/Th	7:00-10:00 pm	3	VC, HV	Elizabeth Gleason
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 5 for required courses.)						
Physics	95.104-021	General Physics II	M-Th	8:00-10:00 am	3	P: 95.103; C: 96.104; SL	Arthur Mittler
	95.141-021	Physics I	M-F	10:30 am-12:30 pm	3 (4)	P: 92.131; C: 96.141; SL	Paul Ring
	95.144-021	Physics II	M-F	10:30 am-12:30 pm	3 (4)	P: 95.141, 92.132, C: 96.144; SL	Roger McLeod
	96.104-021	Experimental General Physics II (2 days per week)	T/Th	2:00-5:00 pm	1 (2)	C: 95.104; SL	Department Faculty
	96.141-021	Experimental Physics I	M/W	2:00-5:00 pm	1 (2)	C: 95.141; SL	Department Faculty
	96.144-021	Experimental Physics II (2 days per week)	T/Th	2:00-5:00 pm	1 (2)	P: 96.141; C: 95.144; SL	Department Faculty
	99.102-021	Radiation and Life Lab	T/Th	2:00-5:00 pm	1 (2)	C: 99.101; SL	Anthony Stevens
Plastics	27.452-021	Selected Topics II	M/W	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
	27.454-021	Selected Topics IV	T/Th	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY (See website for required courses.)							
Political Science	46.110-021	Introduction to Politics	M/W	7:00-10:00 pm	3		Tracey LaFauci
Psychology	(Also see CyberEd course listings on page 7.)						
	47.101-021	General Psychology	M/W	7:00-10:00 pm	3	BS	Daryl Graves
	47.232-021	Psychology of Personality	T/Th	6:30-9:30 pm	3	P: 47.101; BS	Ann MacGibbons
	47.276-021	Theories of Learning	M-Th	10:30 am-12:30 pm	3		Sam Hantzis
	47.335-021	Psychology and Women	M-Th	1:00-3:00 pm	3		M. Stanford-Pollock
Sociology	(Also see CyberEd course listings on page 7.)						
	48.101-021	Introduction to Sociology	M-Th	8:00-10:00 am	3	BS	Carol Brown
	48.101-022	Introduction to Sociology	T/Th	7:00-10:00 pm	3	BS	Levon Chorbajian
	48.110-021	Introduction to Sociology of Values	M-Th	10:30 am-12:30 pm	3	BS	Carol Brown
	48.340-021	Sociology of Sports	M-Th	8:00-10:00 am	3	P: 48.101	Levon Chorbajian
Water/ Wastewater Option	(See Civil Engineering Technology: Water/Wastewater Option.) CERTIFICATE IN WASTEWATER TREATMENT (See page 5 for required courses.) CERTIFICATE IN WATER TREATMENT (See page 5 for required courses.)						
Website Design and Development	(See courses under Art and Information Technology.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.)						

GRADUATE COURSE LISTING

Graduate Courses

Summer Session I

Except as noted: Day classes begin on May 29.
M/W Evening Classes begin on May 30 and include 3 FRIDAYS: June 1, June 15, and June 29.
T/Th Evening Classes begin on May 29 and include 2 FRIDAYS: June 8 and June 23.

Reminder: it is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	Courses are open to students who are matriculated in the University of Massachusetts Lowell MBA Program and who have completed Foundation Core courses. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited master's programs and have the required prerequisites. (See also CyberEd course listing on page 7.)						
	66.725-011	Negotiations	T/Th	6:00-9:30 pm	3	P: Permission of MBA Program Director; MBA Foundation Core	Timm Kainen
Criminal Justice	(See also page 8 for courses offered off-site.)						
		Criminal Profiling	M/W	6:30-10:00 pm	3		Thomas Diskin
Electrical and Computer Engineering	16.528-011	Alternate Energy Sources	M/W	6:00-9:30 pm	3	P: Permission of instructor	Ziyad Salameh
	16.529-011	Electric Vehicle Technology	T/Th	6:00-9:30 pm	3	P: Permission of instructor	Ziyad Salameh
	16.574-021*	Advanced Logic Design (10 weeks)	T/Th	6:00-8:00 pm	3	P: Logic Design	Anh Tran
	16.577-011	Verification of Very Large Digital Designs	M/W	6:00-9:30 pm	3	P: HDL or permission of instructor	James Moran
	*Note: Ten-week Electrical and Computer Engineering courses begin Tuesday, May 29 with final exams on the last course meeting on Monday, July 30 or Tuesday, July 31.						
Health Professions	(See also CyberEd course listing on page 7.)						
	34.615-021	Clinical Education Experience I (May 29 - July 6)	M-F	8:00 am-5:00 pm	2 (4)	P: First-year Physical Therapy graduate students only	Deidra Murphy
Mathematics	92.500-011	Discrete Structures	T/Th	3:15-6:00 pm	3	P: 3 semesters of calculus; some familiarity with matrices P: A thorough knowledge of the calculus sequence and familiarity and comfort with proofs in mathematics P: 92.386 or permission of instructor	Alan Doerr
	92.509-011	Introduction to Probability and Mathematics Statistics	M/W	6:00-9:30 pm	3		Lee Jones
	92.515-011	Introduction to Chaos and Dynamical Systems	M/F	3:15-6:45 pm	3		Vidhu Prasad
	92.590-011	Statistical Quality Control	T/Th	6:00-9:30 pm	3		Shelley Rasmussen
Music	For Summer Music Education Programs, see page 5.						
Psychology	47.531-011	Substance Abuse	T/Th	6:00-9:30 pm	3		Richard Siegel
	47.533-011	Mental Health Problems in the Community	M/W	6:30-10:00 pm	3		Peter Hantzis
	47.551-011	Psychosocial Aspects of Aging	T/Th	6:00-9:30 pm	3		Kevin Callahan
Regional Economic and Social Development	57.512-011	Community Conflict Resolution	T/Th	6:30-10:00 pm	3		David Turcotte
	57.518-011	Comparative Environmental Studies	M-Th	3:00-5:20 pm	3		Thomas Estabrook

Graduate Courses

Summer Session II

Except as noted: Day classes begin on July 9.
M/W Evening Classes begin on July 9 and include 2 FRIDAYS: July 13 and July 27.
T/Th Evening Classes begin on July 10 and include 2 FRIDAYS: July 20 and August 3.

Reminder: it is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	Courses are open to students who are matriculated in the University of Massachusetts Lowell MBA Program and who have completed Foundation Core courses. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited master's programs and have the required prerequisites. (See also CyberEd course listing on page 7.)						
		Portfolio Investment and Security Analysis	M/W	6:00-9:00 pm	3		Frank Andrews
	62.688-021	Special Topics in Marketing: Sustainable/ Green Marketing	M/W	6:00-9:00 pm	3		Eunsang Yoon
Criminal Justice	(See also page 8 for courses offered off-site.)						
	44.543-021	Forensic Psychology	M/W	6:00-9:00 pm	3		Alexandria Weida
		Constitutional Law	T/Th	6:00-9:00 pm	3		David Orrick
Electrical and Computer Engineering	(See listings under Summer I for 10-week offerings.)						
Health Professions		(See also CyberEd course listing on page 7.)					
	34.634-021	Clinical Education Experience II (July 2 - August 24)	M-F	8:00 am-5:00 pm	2 (4)	P: Clinical Education Experience I, second-year Physical Therapy graduate students only	Deidra Murphy
Mathematics	92.516-021	Pattern Recognition and Neural Networks	T/F	4:45-7:45 pm	3	P: Calculus-based probability	Lee Jones
	92.527-021	Geometry	M/W	2:00-5:00 pm	3	P: T.I. 92 required	Marvin Stick
	92.550-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3	P: 92.231	James Graham-Eagle
Music	For Summer Music Education Programs, see page 5.						
Psychology	47.536-021	Forensic Psychology	M/W	6:00-9:00 pm	3		Alexandria Weida

University of Massachusetts Lowell



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www.uml.edu/grad/off_campus.html

> <http://www.uml.edu/grad>

Graduate School Home Page:
• Program Catalog & Academic Calendar
• Course Descriptions

> <http://gsapply.uml.edu>

Apply to Graduate School On-Line

> http://www.uml.edu/grad/TA_RA.html

Contact Graduate Program Coordinators, & Teaching and Research Assistantship Info

GRADUATE STUDIES AT UMASS LOWELL

Adult Psychiatric Mental Health Nursing
Applied Mechanics - Physics
Applied Statistics
Atmospheric Sciences
Biochemistry
Biological Sciences
Biomaterials
Bioprocessing
Biotechnology
Business Administration (M.B.A.)
Cellular Biology
Chemical Engineering
Chemistry
Civil Engineering

Cleaner Production
Clinical Chemistry
Clinical Laboratory Sciences
Coatings and Adhesives - Plastics
Community and Social Psychology
Computational Math
Computer Engineering
Computer Science
Criminal Justice
Design/Manufacturing
Dynamics/Systems/Controls
Economic & Social Development of Regions
Education: Administration
Education: Cert. of Adv. Graduate Study (C.A.G.S.)

Education: Curriculum and Instruction
Education: English as a Second Language
Education: Language Arts and Literacy
Education: Leadership in Schooling
Education: Mathematics for Teachers
Education: Planning & Policy
Education: Reading & Language
Education: Teacher Certification
Educational Administration
Electrical Engineering
Energy Engineering
Energy/Environmental
Environmental Studies
Epidemiology

Ergonomics
Family Health Nursing
Fiber/Composites - Plastics
GeoEnvironmental
Geotechnical
Gerontological Nursing
Health Promotion
Health Services Administration
Industrial Hygiene
Mgmt. Science in Manufacturing
Mathematics
Mathematics & Science Education
Mechanical Engineering
Medicinal Chemistry

Molecular Biology
Music
Music Conducting
Music Education
Music Performance
Nuclear Energy
Nursing
Occupational Ergonomics
Occupational Health
Optics
Opto-Electronics
Physical Therapy
Physical Therapy Adv. Practice
Physics

Plastics Engineering
Pollution Prevention
Polymer Science
Radiological Sciences
Radiological Sciences & Protection
Scientific Computing
Solar Energy
Solid Mechanics/Materials/Structures
Statistics & Operations Research
Structural Engineering - Civil
Thermal/Fluid/Transport Processes
Transportation - Civil
Work Environment
Work Environment Policy

General Information

Office Hours

Advising Center, Southwick Hall 225
Monday-Friday: 8:30 am-5:00 pm

Enrollment Services/Continuing Studies and
Corporate Education, Southwick Hall 223
Monday-Thursday: 8:30 am-8:30 pm
Friday: 8:30 am-5:00 pm

Holiday Hours and Special Hours

May 28: Memorial Day (University closed)
June 10: Commencement
July 4: University closed

The week of July 1 through July 7 (closed July 4),
the Office of Enrollment Services/Continuing
Studies will be open from 8:30 am-5:00 pm.

The week of August 20 through August 25, the
Office of Enrollment Services/Continuing Studies
will be open from 8:30 am-7:00 pm.

Phone Directory

Bookstore — North Campus(978) 934-2623
Bookstore — South Campus.....(978) 934-6908
Continuing Studies
Main Number.....(978) 934-2480
Continuing Studies
Fax Number(978) 934-3087
Continuing Studies
Advising Center(978) 934-2474
Continuing Studies
Enrollment Services.....(978) 934-2480
Library — North Campus
(Alumni/Lydon).....(978) 934-3205
Library — South Campus
(O'Leary)(978) 934-4550
Phone-In Registration —
Operator Assisted.....(978) 934-2700
Phone-In Registration —
Automated.....(978) 934-2050
UMass Lowell Main Number(978) 934-4000
UMass Lowell Directions(978) 934-5800
Weather Cancellations.....(978) 934-2480
(978) 934-2121
Graduate School(978) 934-2380
(978) 656-GRAD

See our Website at
<http://continuing.uml.edu>

You can also visit the Graduate School Website
at www.uml.edu/grad

Registration Information

See Academic Calendars on page 18 for appropriate registration deadlines.

Mail-In Registration

1. Fill out the registration form and return it postmarked no later than the scheduled deadline.
2. Mail to: University of Massachusetts Lowell
Enrollment Services/Continuing Studies and
Corporate Education
One University Avenue
Lowell, MA 01854-2881
3. Payment must be made with the registration form, either by check, money order, VISA, MasterCard, or Discover. Make checks payable to: University of Massachusetts Lowell.
4. Students will receive class confirmation, room assignment, receipt and ID by mail before the first class meeting.

Fax-In Registration

Fill out the registration form and fax it to (978) 934-3087 no later than the scheduled deadline. Be sure to include your VISA, MasterCard, or Discover number.

REGISTER EARLY

Get a head start and register early! Although we cannot guarantee an opening in any class, your chances for being enrolled in the course of your choice are better when you register early. Please note that seats in laboratory courses are limited.

Phone-In Registration with an Operator

1. Payment can be made by VISA, MasterCard, or Discover only.
2. Call (978) 934-2700. Please refer to the Office of Enrollment Services/Continuing Studies hours for phone-in registration times. The registration staff may take only registration information. If you have any questions concerning courses and academic programs, please call (978) 934-2480 or (978) 934-2474.

Automated Phone-In Registration Using the Voice Response System (Credit Courses Only)

Students who are presently enrolled at the University of Massachusetts Lowell, Continuing Studies and Corporate Education and who have a Continuing Studies PIN (students registered during Fall and Spring), may now register for summer classes through the touchtone telephone registration system. This system is available during the following times: Monday-Thursday: 6:00 am-11:00 pm; Friday: 6:00 am-9:00 pm.

To Access the System, Dial (978) 934-2050 or (978) 934-2049

The Voice Response System will answer the call and ask if you want to access Day School (Option 1) or Evening Division (Option 3). Choose Option 3. You will now be asked for your ID # and if valid, your Continuing Studies PIN.

Hold flags will be checked and if none are found, you will be led through the Registration/Add/Drop process by a series of menus and options.

When you finish selecting your courses, you will be asked to pay by credit card and told the amount owed. Registration will be completed upon payment.

If you hang up anytime during the call or do not complete the payment process, all of the ADD transactions will be undone.

If you experience any problems with this system, please report them to Enrollment Services at (978) 934-2588.

Walk-In Registration at the Office of Enrollment Services/Continuing Studies, Southwick Hall, Room 223, North Campus

Please refer to the Office of Enrollment Services/Continuing Studies hours for walk-in registration. Payment must be made at the time of registration. Payment after 4:00 pm must be made by check, money order, VISA, MasterCard, or Discover. Students will receive class confirmation, room assignment, receipt, and ID at the time they register.

Late Registration — See page 18 for late registration dates

Note: There is an additional \$50.00 fee for late registration. No exceptions.

Final Drop/Add Period

See the appropriate academic calendar. Drop/adds can be processed in the Office of Enrollment Services/Continuing Studies, Southwick Hall, North Campus.

Last Week to Withdraw with "W" Notation

See the appropriate academic calendar for the last day to withdraw. Students withdrawing from any class must officially notify the Office of Enrollment Services in writing, in person, by fax, or by mail postmarked no later than the scheduled deadlines. (See page 18.) Verbal messages to faculty or staff do not constitute official notification.

Identification Card

Students registering in person will receive an ID card during the office walk-in registration and general registration. Students who register by phone or mail will receive their ID by return mail with their letter of confirmation.

Institutional Disclosure

Institutional Disclosure of Information according to the Higher Education Act is available at www.uml.edu/student-services.

Students with Disabilities

A student with a disability who needs special arrangements should contact Kerry Donohoe at (978) 934-2465 early in the registration process. Special advising, registration assistance, preferential scheduling, and alternative examination procedures are available. Students must qualify for handicapped parking stickers. Special parking is also available on a temporary basis.

The University's Annual Campus Crime and Safety Report

The University's Annual Campus Crime and Safety Report, which includes campus crime statistics and information about campus alcohol, drug and sexual assault policies as well as other important matters is available on the Web at <http://www.uml.edu/student-services/dean/CampusCrimeReport.html>. Paper copies of this report are available upon request at University Police (Ball Hall — 978-934-2384) and at the Office of Student Services (Cumnock Hall — 978-934-2100).

Correct Social Security Number

The University of Massachusetts Lowell must obtain your correct social security number (SSN) to file certain information returns with the IRS as well as to furnish a statement to you. The returns the University must file contain information about qualified tuition and related expenses (Form 1098-T, Tuition Payments Statement). The information about your tuition will help to determine whether you, or the person who can claim you as a dependent, may take the Hope credit or lifetime learning credit to reduce the Federal income tax.

Bookstore Locations

North Campus — Falmouth First Floor, (978) 934-2623
South Campus — McGauvran Student Union Building, (978) 934-6908
Please call the bookstore to confirm the location of your textbook.

Financial Information

Tuition is priced on the basis of credit hour unless the contact hour is different. Tuition is then based on the listed contact hour.

Tuition and Fee Information

Undergraduate Tuition	\$185.00
(per credit/contact hour)	
Undergraduate Audit	\$185.00
(per credit/contact hour)	
Undergraduate High Tech and Specialized Courses (includes undergraduate courses offered on the UML campus that are listed under Computer Science and Information Tech.)	\$190.00
Undergraduate High Tech and Specialized Courses Audit	\$190.00
Undergraduate Off-Campus	\$220.00*
(per credit/contact hour)	
Undergraduate CyberEd/Distance Learning Courses	\$220.00
(per credit/contact hour)	
Undergraduate CyberEd/Distance Learning Courses Audit	\$220.00
(per credit/contact hour)	
CSCE Graduate On-Campus Courses	\$240.00
(per credit/contact hour)	
Graduate CyberEd/Distance Learning Courses	\$300.00
(per credit/contact hour)	
Graduate Off-Campus Courses	\$240.00*
(per credit/contact hour)	
Graduate Courses at Westborough	\$1200.00
Late Registration Fee (non-refundable)	\$50.00

*Some tuitions may vary depending on customization and customer and program requirements.

Students who have checks returned due to insufficient funds will be charged an additional \$30.00 for the processing of the registration.

Overdue Accounts

Students will be permitted to attend class and to utilize facilities only after they have cleared all their financial obligations to the University. In addition, student transcripts and diplomas will not be released until all debts have been paid. Should it be necessary to utilize the services of a collection agency or attorney for an overdue student account, the student will be liable for any and all legal fees, commissions, and associated service charges.

Directed Studies

Directed Studies and Practicums are considered Special Programs, and as such, tuition remission and certificates of eligibility cannot be accepted.

NOTE:

Veterans' Information

Veterans must be matriculated in an undergraduate degree program and have all appropriate paperwork

REGISTRATION INFORMATION

on file in the Office of Enrollment Services/ Continuing Studies, including a DD214, an Admission Application form, and official transcripts from other colleges in order to receive VA benefits. Waivers for legal Massachusetts residents (residency must be documented) cover 100% cost of tuition, are not retroactive and do not cover registration and other fees. Veterans requesting benefits must check the appropriate line on the registration form. Veterans should use the mail-in or walk-in options when registering and should provide all necessary documentation (no phone-in). For additional information, please see our Website at <http://continuinged.uml.edu>.

Veterans' waivers are available for on-campus courses provided there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. **However, due to the high cost of Distance Learning courses, there are no waivers available for these courses.** Merit and Need-Based Assistance Grants for CyberEd courses are available to veterans who are presently enrolled in degree and certificate programs and who are making satisfactory academic progress towards their degrees or certificates.

Third-Party Payment

All students using company direct payment, military plans, state tuition waivers, or veterans' waivers must include the appropriate forms or authorizing letters with their registration, or have them on file. No tuition refund is awarded for late submission of eligibility form. Students receiving company reimbursement must prepay their own tuition. For additional information, call (978) 934-2479.

NOTE:

Senior Citizens

Senior citizens (60 years or older) who are Massachusetts residents may attend classes in Continuing Studies credit programs tuition-free provided that there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Please note that waivers are not retroactive and do not cover fees. Proof of Massachusetts residency and birth date must be provided annually at the time of registration. **However, due to the high cost of Distance Learning courses, there are no waivers available for these courses.** Merit and Assistance Grants are available for veterans and seniors taking CyberEd courses who are presently enrolled in Degree and Certificate Programs and are making satisfactory academic progress towards their degrees or certificates.

Tuition Refund Policy for Credit Courses

Any eligibility for tuition refund is based on the academic calendar, not class attendance, and is pro-rated as follows, excluding fees:

Summer I (Courses spanning Summer I and II)

Withdrawal on or before May 18	100%
Withdrawal from May 19 to before the first class meeting	90%
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

Summer II

Withdrawal on or before June 27	100%
Withdrawal from June 28 to before the first class meeting	90%
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

We are no longer accepting applications for the following degree and certificate programs:

Associate's Degrees:

Accounting
Applied Chemistry
Applied Chemistry: Biotechnology Option
Applied Chemistry: Hazardous Waste Option
Applied Mathematics
Applied Mathematics: Computer Mathematics Option
Banking
Criminal Justice

Bachelor's Degrees

Applied Chemistry
Applied Chemistry: Coatings Option

Certificate Programs:

Banking
Engineering Skills
International Trade
Internet System Administration
Novell Option of Data Telecommunications
Purchasing
Security Management
Windows Programming

A student enrolled in any of these programs should schedule an appointment with the appropriate program advisor to help plan a schedule for degree or certificate completion.

Tuition Refund Policy for CyberEd Courses

Withdrawal on or before May 18	100%
Withdrawal from May 21 to May 25	90%
Withdrawal May 26 – June 1	80%
Withdrawal through June 8	40%
Withdrawal after June 8	No refund

Fees will be refunded if Continuing Studies is responsible for cancellations.

Students withdrawing from any class must officially notify the Office of Enrollment Services/Continuing Studies and Corporate Education on forms provided by the Office. Verbal messages to faculty or staff do not constitute official notification.

Tuition Refund Policy for Students Receiving Title IV Financial Aid and Enrolled in a Degree or Specifically Designated Certificate Program

Refunds for Title IV financial aid recipients will be processed according to federal guidelines and institutional policy. Please call the Financial Aid Office at (978) 934-4220 if you have any questions.

Tuition Refund Policy for Noncredit Courses

Participants who withdraw before the first class meeting will receive the total amount paid. Participants who withdraw following the first class meeting will receive a 40% refund. No refunds are given for withdrawal after the second class meeting.

Student Health Insurance

Every student who is enrolled in at least 9 semester hours or more in a degree program is required by Massachusetts state legislation to participate in a qualifying student health insurance program. The cost of this insurance is \$366.00 from January 1 until August 15, 2001. Payment of the appropriate fee will be required at registration. To waive participation in this program, students must fill out a form at registration showing equivalent coverage. The name of your insurance company and your policy number are required information on the waiver form.



Academic Calendar & Registration Information

May 29–June 29 Summer Session I

Day classes begin on Tuesday, May 29.

M/W Evening classes begin on Wednesday, May 30 and include 3 FRIDAYS: June 1, June 15, and June 29 at the regularly scheduled hours.

T/Th Evening classes begin on Tuesday, May 29 and include 2 FRIDAYS: June 8 and June 22 at the regularly scheduled hours.

We encourage you to mail-in, phone-in, or fax your registration.

May 28: Memorial Day observed

Mail-In Registration:	April 9 to May 18
Phone-In Registration:	April 9 to May 18
Fax-In Registration:	April 9 to May 18
Walk-In Registration:	April 9 to May 18

General Registration and Open House: May 17

Late Registration: Begins May 21

There is an additional \$50.00 fee for late registration.

Last Day to Add a Lab

Day Classes: May 31

Last Day for Partial Refund

(Before the 3rd class meeting)

Day Classes: May 31

M/W Evening Classes: June 4

T/Th Evening Classes: June 5

CyberEd: Through June 8

Last Day to Drop/Add Course

Day Classes: June 4 (3-credit courses);

June 4 (4-credit courses)

M/W Evening Classes: June 4

(Before the 3rd class meeting)

T/Th Evening Classes: June 5

(Before the 3rd class meeting)

CyberEd: Through June 8

Last Day to Withdraw with "W" Notation

Day Classes: June 14 for a 3-credit course

June 15 for a 4-credit course

M/W Evening Classes: June 15

(Before the 9th class meeting)

T/Th Evening Classes: June 21

(Before the 9th class meeting)

CyberEd: Through July 27

Final Examinations

Day Classes: June 28 for a 3-credit course

June 29 for a 4-credit course

M/W Evening Classes: Friday, June 29

T/Th Evening Classes: Thursday, June 28

NOTE: M/W evening courses meet twice a week plus 3 Fridays: June 1, June 15, and June 29.

T/Th evening courses meet twice a week plus 2 Fridays: June 8 and June 22.

July 9–August 17 Summer Session II

Day Classes begin on July 9.

M/W Evening classes begin on July 9 and include 2 FRIDAYS: July 13 and July 27 at the regularly scheduled hours.

T/Th Evening classes begin on July 10 and include 2 FRIDAYS: July 20 and August 3 at the regularly scheduled hours.

We encourage you to mail-in, phone-in, or fax your registration to guarantee the class of your choice and the receipt of your classroom confirmation.

July 4: Independence Day observed

Mail-In Registration:	April 10 to June 29
Phone-In Registration:	April 10 to June 29
Fax-In Registration:	April 10 to June 29
Walk-In Registration:	April 10 to June 29

Late Registration: Begins July 2

There is an additional \$50.00 fee for late registration.

Last Day to Add a Lab

Day Classes: July 11

Last Day for Partial Refund

(Before the 3rd class meeting)

Day Classes: July 11

M/W Evening Classes: July 13

T/Th Evening Classes: July 17

Last Day to Drop/Add Course

Day Classes: July 12

(Before the 4th class meeting)

M/W Evening Classes: July 13

(Before the 3rd class meeting)

T/Th Evening Classes: July 17

(Before the 3rd class meeting)

CyberEd: June 8

Last Day to Withdraw with "W" Notation

Day Classes: August 1 for a 3-credit course

July 26 for 4-credit courses

M/W Evening Classes: August 1

(Before the 10th class meeting)

T/Th Evening Classes: August 3

(Before the 10th class meeting)

CyberEd: Through July 27

Final Examinations

Day Classes: August 15 for a 3-credit course

August 16 for 4-credit course

M/W Evening Classes: Wed., August 15 at 7 pm

T/Th Evening Classes: Thurs., August 16 at 7 pm

Note: M/W evening courses meet twice a week plus 2 Fridays: July 13 and July 27. T/Th evening courses meet twice a week plus 2 Fridays: July 20 and August 3.

Academic Information



The University of Massachusetts Lowell is accredited by the New England Association of Schools and Colleges, which accredits schools and colleges in the six New England states. Membership in the association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators. The programs in Civil Engineering Technology, Electronic Engineering Technology, and Mechanical Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Bachelor of Science in Business Administration (BSBA) is accredited by the AACSB — The International Association of Management Education.

Catalog

Students should refer to the Continuing Studies and Corporate Education catalog for rules, regulations, program outlines, and course descriptions. The catalog is available in the Advising Center and the Office of Enrollment Services/Continuing Studies and at <http://continuinged.uml.edu>.

Admission into a Certificate or Degree Program

Students who have graduated from high school or who have earned a high school equivalency certificate are invited to apply for programs leading to a Certificate or an Associate's or Bachelor's degree. Applications for all programs are accepted on a rolling admissions basis. Contact the Continuing Studies Office at (978) 934-2470 (certificate programs) or (978) 934-2474 (degree programs) for an application and information on the application procedure. There is no fee to apply.

The following degree and certificate programs are available on a part-time evening basis:

College of Engineering

Associate's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Water Treatment Option
- Civil Engineering Technology: Wastewater Treatment Option
- Civil Engineering Technology: Surveying Option
- Electronic Engineering Technology
- Mechanical Engineering Technology

Bachelor's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Environmental Option
- Electronic Engineering Technology
- Mechanical Engineering Technology
- Mechanical Engineering Technology: Manufacturing Option
- Mechanical Engineering Technology: Plastics Option

College of Arts and Sciences

Associate's Degree

- Information Systems

Bachelor's Degrees

- Applied Mathematics
- Applied Mathematics: Computer Mathematics Option
- Criminal Justice
- Criminal Justice: Paralegal Option
- Information Systems
- Liberal Arts

College of Management

Associate's Degree

- Management

B.S. in Business Administration

Certificate Programs

- Accounting
- Client/Server Database and Administration
- Community Policing
- Computer-Assisted Manufacturing
- Computer Engineering Technology
- Contemporary Communications
- Data/Telecommunications
- Electronics Technology
- Electro-Optics
- Environmental Technology
- Fundamentals of Information Technology
- Graphic Design and Digital Imaging
- Hazardous Waste Management
- Interactive Game Design
- Intranet Development
- Land Surveying
- Manufacturing Technology

- Multimedia Applications
- Nutrition
- Paralegal Studies
- Plastics Engineering Technology and Plastics Engineering Technology with Packaging Option
- Quality Assurance
- Semiconductor Manufacturing
- Spanish
- Technical Writing
- UNIX
- Wastewater Treatment
- Water Treatment
- Website Design and Development

Certificate Completion

When a student completes the necessary courses for a certificate program, the student should complete and submit a Certificate Award Petition to Continuing Studies.

Course Grades

Grade reports for the Summer session will be mailed to students approximately two weeks after exams end. Students who have received their PIN can also call the Voice Response System at (978) 934-2050 to receive their Summer grades, which will be available as soon as they are posted.

Advising Information



Drop-in Advising Center

Students are welcome to drop by the Advising Center, located in Southwick Hall, Room 225, from 8:30 am to 5:00 pm for general advising, information on associate's and bachelor's degrees and certificate programs, and/or to obtain catalogs and brochures. Call (978) 934-2474 for information.

For questions on graduate programs, call the Graduate School at (978) 934-2380.

Appointments with Program Coordinators and General Advisors

In addition to the general advising conducted at the Advising Center, appointments with Advisors and Program Coordinators are scheduled in Enrollment Services. Evening supervisors are also available in Enrollment Services, Southwick Hall, Room 223 from 5:00-8:00 pm to answer questions and conduct status reviews. Students are encouraged to call the Advising Center at (978) 934-2474.

Evening Supervisors

- Professor Alan Doerr
- Professor Bernard Shapiro

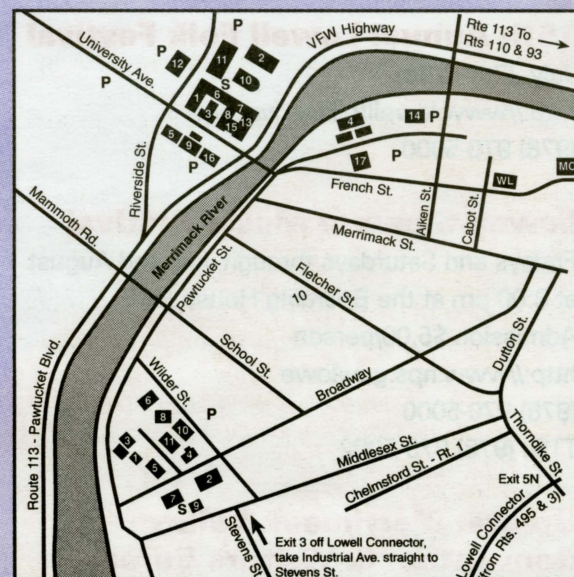
Faculty Advisors

- Professor Paul Damour: Biology, Chemistry, Environmental Science, Physics
- Professor Alan Doerr: Applied Mathematics
- Professor Stephen Driscoll: Plastics Engineering Technology and Plastics Engineering Technology with Packaging Option
- Professor Ann Marie Hurley: Computer Math, Information Systems
- Professor Joseph Lipchitz: Criminal Justice, Liberal Arts, Paralegal Studies
- Professor Donald Pottle: Department Head, Engineering Technology
- Professor Charles Thompson: Accounting and Management
- Professor Robert Tuholski: Mechanical Engineering Technology
- Professor Fahd Wakim: Electronic Engineering Technology

General Advisors

- Ms. Elaine Bourret: Accounting and Management
- Ms. Joyce Brill: Information Systems
- Ms. Kerry Donohoe: Degree and Certificate Programs
- Mr. Daniel Howell: Civil Engineering Technology
- Ms. Olyce Moore: Degree and Certificate Programs
- Ms. Adrianna Morris: Information Systems
- Ms. Claire Murphy: Bachelor of Liberal Arts, Criminal Justice
- Ms. Susan Wartman: Degree and Certificate Programs
- Ms. Brenda Woonton: Degree and Certificate Programs

Campus Information



North

- 1 BL Ball Engineering Ctr.
- 2 Costello Gym
- 3 Cumnock Hall
- 4 Dormitories
- 5 Eames Hall
- 6 EB Engineering
- 7 FA Falmouth
- 8 KI Kitson
- 9 Alumni/Lydon Library
- 10 EC Pinanski
- 11 OH Olney
- 12 OS Olsen
- 13 PA Pasteur
- 14 Research Foundation
- 15 SO Southwick Hall
- 16 Smith Hall
- 17 Fox Student Union
- P Parking
- S Security

South

- 1 Allen Hall
- 2 CO Coburn
- 3 Concordia Hall
- 4 Dining Hall
- 5 DU Dugan Hall
- 6 DR Durgin Hall
- 7 MA Mahoney Hall
- 8 OL O'Leary Library
- 9 Power Plant
- 10 SU Student Union
- 11 WE Weed Hall
- P Parking
- S Security

Downtown

- MO Mogan Center
- WL Wannalancit

Directions

For UMass Lowell online directions, call (978) 934-2480.

Parking

Students are encouraged to park in the numerous parking lots on the North and South Campus. Parking stickers may be obtained from the University Police in Ball Hall 125 North Campus (open 24 hours a day, 7 days a week). This sticker entitles students to park after 5:30 pm in any University parking lot except Cumnock Hall.

Students and faculty should not compromise public safety by blocking access of fire lanes, ambulance and other emergency vehicles. Students and faculty should not park in handicap spaces unless they display a handicap sticker. Students and faculty will be towed and/or ticketed for violations. In addition, students and faculty will be towed by the Lowell police if they park in "Residential Parking" areas.

Locating Your Classroom

Upon registration, students are issued a confirmation printout which includes the two-letter building code along with the room number. Refer to the map and building key above to locate where your class will be held. For assistance, call the Advising Center at (978) 934-2474.

University Escort Service

The University now operates a motorized escort service seven nights a week from 6:00 pm to 1:00 am. Call Ext. 2222 for a ride anywhere on campus — from the parking lots, to the library, the residence hall, or the gym. It is a service designed for the entire University community day and evening students, staff, and faculty.

This newspaper is printed at no cost to the Commonwealth of Massachusetts. The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action University and does not discriminate in employment or access to programs or services on the basis of race, sex, sexual orientation, color, national origin, religion, handicap, or veteran's status and is in compliance with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, 1990. Any inquiries and/or grievances may be referred to the Affirmative Action Officer, the Title IX Coordinator, the Disabilities Coordinator and/or to the Director, Office for Civil Rights, U.S. Department of Health and Human Services, Washington, D.C.

Every effort has been made to ensure the accuracy of the information presented in this bulletin. However, Continuing Studies and Corporate Education reserves the right to implement new rules and regulations and to make changes of any nature in its program, calendar, locations, tuition, and fees. Whenever possible, appropriate notice of such changes will be given before they become effective.

In registering for courses, each student assumes full responsibility for knowledge of and compliance with the definitions, regulations, and procedures for the University as set forth in the appropriate publications and bulletins.

Summer 2001 Activities in Lowell

15th Annual Lowell Folk Festival

July 27th - 29th
<http://www.lowellfolkfestival.org>
(978) 970-5000

Lowell Summer Music Festival

Fridays and Saturdays through July and August
at 8:00 pm at the Boarding House Park
Admission \$5.00/person
<http://www.nps.gov/lowe>
(978) 970-5000
TTD: (978) 970-5002

Greater Merrimack Valley Convention & Visitors Bureau

<http://www.merrimackvalley.org>
(978) 453-6150

Lowell National Historical Park

<http://www.nps.gov/lowe>
(978) 970-5000

Lowell Celebrates Kerouac, Inc.

<http://ecomunity.uml.edu/lck>
(877) KEROUAC (info only recording)

The New England Quilt Museum

March 29 - June 3: Quilts for Life: Kathleen
Weinheimer and Her Students
June 7 - August 19: In Stitches: Quilts with a
Sense of Humor
August 23 - October 28: Parallel Threads
<http://www.nequiltmuseum.org>
(978) 452-4207

Tsongas Industrial History Center

<http://www.uml.edu/tsongas>
(978) 970-5080

American Textile History Museum

<http://www.athm.org/>
(978) 441-0400

Whistler House Museum of Art

<http://www.whistlerhouse.org>
(978) 452-7641

Lowell Memorial Auditorium

May 9: Jekyll & Hyde
June 6: George & Barbara Bush
June 20: Aretha Franklin
<http://www.lowellauditorium.com>
(978) 454-2299

Merrimack Repertory Theatre

May 18 - June 17: Art
Award-winning comedy by Yazmina Reza
<http://www.mrtlowell.com>
(978) 454-3926

Paul Tsongas Arena

<http://www.paultsongasarena.com>
(978) 848-6900

Lowell Spinners

<http://www.lowellspinners.com>
(978) 459-2255

HOME FOR THE SUMMER?

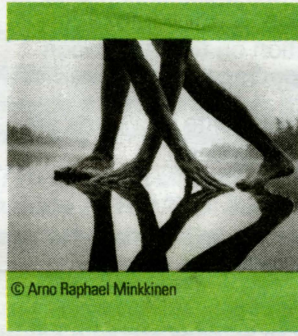
Take one of our summer Online Courses
and use it towards completing a degree
at your own school or university!

If you study at another college or university, you may be able to take a CyberEd online course this summer and transfer it into your program of study at another institution. We offer a wide selection of credit online courses, many of which can be used to fulfill degree requirements at other institutions of higher education. Take a look at the wide range of online courses we offer... if any of them are comparable to the credit courses required at your institution, you may be able to take them over the summer and transfer them into your program of study.

Please note: Individual schools and colleges have specific policies regarding transfer requirements. Students should check with their originating college or university regarding acceptance of transfer credits from other institutions of higher education.

Advanced Summer Photography Intensive Abroad! Study Under the Guidance of World-Renowned Photographer Arno Rafael Minkkinen

An intensive, black-and-white course for experienced photographers and advanced photography students who wish to explore their personal vision at one of the following workshop locations:



© Arno Raphael Minkkinen

June 11-15:
Vevey, Switzerland

July 8-13:
Portland, Oregon

July 29-Aug 4:
Santa Fe, New Mexico

Aug 5-Aug 11:
Tuscany, Italy

Aug 19-Aug 25:
Rockport, Maine

After completing a one-week intensive at one of the five remote locations, students will meet with the instructor in a directed study format to complete their photography projects.

Additional travel, tuition, and housing fees may apply. Students interested in enrolling in the course must contact Prof. Minkkinen directly for permission. Email: Arno_Minkkinen@uml.edu.

For more details on the advanced summer photography workshop, visit <http://continuing.uml.edu/photography.htm>.

Find out about UMass Lowell's full-time degree programs in Fine Arts! Visit <http://www.uml.edu/dept/art>.

REGISTRATION FORM FOR CREDIT COURSES

Note: Please remember to fill in your work, home phone numbers and email address. This will allow us to reach you in case of class cancellations.

University of Massachusetts Lowell

Continuing Studies and Corporate Education (978) 934-2480
One University Avenue, Lowell, MA 01854

PLEASE USE INK AND PRINT

CHECK APPROPRIATE REGISTRATION STATUS:

☐ Summer I (May 29-June 29) ☐ Summer II (July 9-August 17)

☐ Graduate

Social Security No. _____ Tax ID No. _____

Name _____

Street & No. _____

City & State _____ Zip Code _____

Date _____

Sex ☐ M ☐ F Date of Birth _____

Work phone _____

Home phone _____

Email _____

Company Name _____

Street Address _____

City & State _____

Change of name or address since last registration? ☐ yes ☐ no

Former name _____

Will you be using veteran benefits? ☐ yes ☐ no

State/Active Duty _____ G.I. Bill _____

COURSES FOR WHICH YOU ARE REGISTERING									
Course Number					Course Title				Credits
					SUMMER I				
					SUMMER II				

COMPLETE IF PAYING BY CREDIT CARD

☐ MasterCard ☐ VISA ☐ Discover Account Number _____

Expiration Date _____ Customer Signature _____

Tuition and Fees*	
Tuition	
Late Fee (Save \$50 Late Fee - Register Early)	
Total	\$.